AUTOMIZER RIGHT-HAND™ W/ MULTIPLEXED SYSTEM

OPERATOR MANUAL



Labrie Enviroquip Group

AUTOMIZER RIGHT-HAND™

W/ MULTIPLEXED SYSTEM

OPERATOR MANUAL



Liability

Labrie Enviroquip Group assumes no liabilty for any incidental, consequential, or other liability that might result from the use of the information contained in this document.

All risks and damages, incidental or otherwise, arising from the use or misuse of the information contained herein are entirely the responsability of the user.

Although careful precaution has been taken in the preparation of this document, Labrie Enviroquip Group assumes no responsiblity for errors or omissions.

Table of Contents

Liability ii

Table of Contents v

Introduction 1

- Introducing the AUTOMIZER RIGHT-HAND™ WITH MULTIPLEXED SYSTEM 1
- To Contact Labrie Plus 2
  - In the U.S. 2
  - In Canada 2

Safety 3

- Conventions 3
- Basic Safety Notions 3
- Responsibilities 4
  - Employer Responsibilities 4
  - Employee Responsibilities 5
- Things to Do 5
- Things to Avoid 5
- General Precautions 6
- Fire 8
- Safety Kits 8
- Location of Safety and Informative Decals 8
  - Decals on Body 9
  - Decals on Tailgate 17
  - Decals outside Cab 18
  - Decals inside Cab 19
  - Multiplex Switch Actuators (1) 25
  - Multiplex Switch Actuators (2) 26
- Safety Features 27
  - Back Up Alarm 27
  - Body Safety Prop 27
  - Tailgate Safety Prop 28
  - Camera System (optional) 31
  - Tailgate Holding Valve 31
- Cleanliness 32
- Locking Out and Tagging Out the Vehicle 32
- Shutting Down the Vehicle 34
- Prior to Start Up 35
- Driving the Vehicle 36
  - Driving Speed 36
  - Right-Hand Side Driving Position 37

Controls and Indicators 39

- Labrie's Multiplexed System 39
  - Cart Counter (optional) 40
  - Warning and Caution Messages 41
  - Hydraulic Oil Temperature Indicator (optional) 47
  - Time and Date Indicator 47
  - Main Menu 47
  - Operational diagram of the Multiplexed System 56
- Rocker Console 58

- Pump Switch ... 58
- Body Up Switch ... 59
- Body Down Switch ... 59
- Tailgate Up Switch ... 60
- Tailgate Down Switch ... 60
- Packer Multi-Cycle Switch ... 60
- Right-Hand Side Work Light Switch ... 60
- Hopper Work Light Switch ... 60
- Crusher Panel Down Switch (optional) ... 61
- Crusher Panel Up Switch (optional) ... 61
- Right-Hand Side Body Control Station Switch (optional) ... 61
- 10-Second Inhibit Switch ... 62
- Auto-Packing Switch ... 62

In-Cab Packer Control Station ... 62
- Stop Push-Button (red) ... 62
- Pack Push-Button (green) ... 63
- Retract Push-Button (yellow) ... 63

Joystick Controls ... 64
- Arm Joystick ... 64

Cab Dashboard ... 66
- Parking Brake ... 66
- Arm Extended Warning Lights ... 67

Operating the AUTOMIZER RIGHT-HAND™ ... 69

Daily Inspection ... 69
- Approaching the Vehicle ... 69
- Visual Inspection ... 70
- Starting the Vehicle ... 70
- Body Inspection Procedure ... 70
- Arm Inspection Procedure ... 71
- Inspection Sheet ... 74

Loading and Packing ... 75
- Planning your Route ... 75
- Safety while Using the Packing System ... 75
- Loading Refuse ... 75
- Packer Description ... 76
- Loading Procedure ... 76
- Pack on the Go ... 78

Unloading ... 78
- Unloading Procedure ... 78
- Unloading Corrective Actions ... 79
- Unloading Emergency Actions ... 81

Emergency Actions ... 82
- Hydraulic Oil Spill ... 82
- Someone is Trapped in Packer System ... 82

End-of-the-Day Cleaning and Inspection ... 82
- Daily Hopper Cleaning ... 82
- Daily Chassis Cleaning ... 83
- Water Trap Bleed ... 83

Troubleshooting Quick Reference ... 84

1

Introduction

The purpose of this manual is to introduce operators to the operational procedures for the Multiplexed System-equipped AUTOMIZER RIGHT-HAND™. For information regarding maintenance procedures, refer to the Maintenance Manual for the Multiplexed System-equipped AUTOMIZER RIGHT-HAND™.

Introducing the AUTOMIZER RIGHT-HAND™ WITH MULTIPLEXED SYSTEM

The Multiplexed System-equipped AUTOMIZER RIGHT-HAND™ is a straight-frame, side-loading vehicle, manufactured to the highest standards, and designed to collect residential and commercial refuse and recycling materials.

This vehicle is a modified version of the Labrie AUTOMIZER RIGHT-HAND™. It has been modified to be equipped with the Multiplexed system.

The Multiplexed system used by Labrie is a CAN-based system that integrates a display monitor, a rocker switch panel, a joystick and three electronic controllers. This whole system has been designed to help you operate your unit in an efficient and easy way.

The Multiplexed System-equipped AUTOMIZER RIGHT-HAND™ would not be complete without the automated Right-Hand™ arm. Installed on the right-hand side of the vehicle, this automated arm is unmatched in quality and durability. It offers many advantages, including smooth pick-up and dump cycles as well as low operational noise.

IMPORTANT: Multiplexed System-equipped AUTOMIZER RIGHT-HAND™ units must be operated *by only one person*.

To Contact Labrie Plus

In the U.S.

Address:	1981 W. Snell Road Oshkosh, WI 54904
Toll Free:	1-800-231-2771
Telephone:	1-920-233-2770
General Fax:	1-920-232-2496
Sales Fax:	1-920-232-2498
Parts and warranty:	During business hours, 7:00 AM to 7:00 PM Central Standard Time
Technical Support Service:	Available 24 hours

In Canada

Address:	175 Route du Pont St-Nicolas, QC G7A 2T3
Toll Free:	1-877-831-8250
Telephone:	1-418-831-8250
Service Fax:	1-418-831-1673
Parts Fax:	1-418-831-7561
Parts and warranty:	During business hours, 8:00 AM to 5:00 PM Eastern Standard Time
Technical Support Service:	Available 24 hours
Website:	www.labriegroup.com
E-mail:	sales@labriegroup.com

IMPORTANT: For technical support and parts ordering, the serial number of your vehicle is required. Therefore, Labrie Enviroquip Group recommends to keep record of the information found on the VIN plate, which is located in the cab.

2

Safety

Safety is always of prime importance when operating any type of equipment. All operators working with the Automizer Right-Hand™ must be aware of the safety practices and features detailed in this section.

Conventions

Danger!	Indicates a hazardous situation which, if not avoided, ***will*** result in serious injury or death.

Warning!	Indicates a hazardous situation which, if not avoided, ***could*** result in serious injury or death.

Caution!	Indicates a hazardous situation which, if not avoided, may result in ***minor or moderate injury.***

Basic Safety Notions

The following safety notions are related to the use of the Automizer Right-Hand™. It is important to point out that the safe use of the vehicle remains the user's responsibility. He must heed all safety notions explained in this manual and on the decals found on the vehicle.

Danger!	Always be aware of the vehicle's surroundings to make sure that no pedestrians, passersby, bystanders, or other people or vehicles are in any way exposed to any danger caused by the use of the Automizer Right-Hand™.

Danger!

Never get in the hopper area when the engine is running.
Only authorized personnel may do so following a lockout/tagout procedure (see *Locking Out and Tagging Out the Vehicle* on page 32).

Responsibilities

Safety is everybody's responsibility. Both employer and employee must play their part to ensure the safety of the operator, the vehicle, and its immediate surroundings.

Employer Responsibilities

It is the responsibility of the employer:

- To ensure that the AUTOMIZER RIGHT-HAND™ is operated in accordance with all safety requirements and codes, including all applicable regulations, the Occupational Safety and Health Act (OSHA), and the American National Standards Institute (ANSI).
- To ensure that employees are qualified for operating the vehicle and its equipment, and that they all take safety measures before working with them.
- To properly maintain all mobile equipment to meet all provincial/state and federal safety standards.
- To supply adequate instructions and training for the safe use of the vehicle and its equipment before assigning an employee to such vehicle.
- To keep the vehicle maintained and properly adjusted to meet the manufacturer's standards and recommendations. For help or for more information, please contact the manufacturer or any of its authorized representatives.
- To keep records of all vehicle breakdowns and malfunctions, as well as any inspection and maintenance.
- To ensure that all failures or malfunctions that may be affecting the safe use of the vehicle are repaired before the vehicle is put back into operation.
- To meet the appropriate lighting requirements for night shift work (if permitted).
- To regularly accompany the vehicle operator and take measures to ensure the smooth and safe operation of the vehicle.
- To make sure that the backup alarm works properly when the vehicle is in reverse.
- To take necessary measures that follow any damage or malfunction reported by any employee.
- To establish and ensure the application of a "lockout/tagout" procedure any time inspection, repair or maintenance is performed on the vehicle, regardless of whether it takes place on the road or in the garage.

Employee Responsibilities

It is the responsibility of the employee:

- To enforce all safety measures to meet the requirements established by the employer.
- To operate the AUTOMIZER RIGHT-HAND™ only after having received instruction and training.
- To perform routine daily unit inspections.
- To make sure that nobody is near the vehicle before activating any of the controls, and to be prepared to stop at any indication of possible danger.
- To immediately report any damage or malfunction of the vehicle to the employer or supervisor.

IMPORTANT: Do not use damaged equipment.

Things to Do

- Inspect the body and all systems at the beginning of each day.
- Make sure that the area is clear of any people or possible obstructions.

IMPORTANT: Be extremely cautious in areas where small children may be present.

- Wear safety glasses and footwear, gloves, and any other safety equipment when loading and packing refuse.
- Check if mirrors, windows, lights, and monitor equipment are clean and properly adjusted.
- Check for explosive trash (e.g. television sets, paint cans, fluorescent light tubes, etc.).
- Use caution when driving with an unevenly distributed load.
- Inspect for overhead hazards (e.g. power lines) prior to hoisting the body or climbing on it.
- Always use the body safety prop when servicing under the body.
- Always use the tailgate safety prop before entering the area between the main body and the tailgate.
- Obey all warning and operation stickers.

Things to Avoid

- Do not operate any vehicle while under the influence of alcohol, narcotics or other intoxicants.
- Do not talk on a cell phone or listen to loud music while driving.
- Do not wear jewelry or loose clothing.
- Do not leave the vehicle before it is brought to a complete stop and work brake or parking brake is applied.
- Do not enter the hopper or main body unless the engine is shut off, the key is removed and there is an out-of-service tag on the steering wheel (see *Locking Out and Tagging Out the Vehicle* on page 32).
- Do not hoist the body on uneven ground.

- Do not back up the vehicle when the body is raised.
- Do not drive with the tailgate fully open unless it is to unload refuse at the landfill.
- Do not use the body safety prop to prop a *loaded* body.

General Precautions

Danger! Operators must adhere to the following precautions *at all times.* Failure to do so may result in vehicle and/or property damage, personal injury, or even death.

It is the employer's responsibility to ensure that *only* qualified employees operate this vehicle.

- Read and make sure that you fully understand this manual and all safety decals before operating this vehicle. Maintenance personnel must also read and understand the Maintenance Manual for this vehicle. In case of doubt, ask a supervisor for clarifications.
- Before every work day, inspect the body, the packing system, and any system that might compromise public and/or operator safety.
- Verify that the accelerator pedal, the steering wheel, mirrors, brakes, and turn signals are in good working order.
- When driving the vehicle, keep both hands on the steering wheel at all times.
- Stop the vehicle completely and put on the parking brake before leaving the driving position.
- When the vehicle is parked, the parking brake *must* be applied.
- Before activating the automated arm, operators shall make sure that people and obstructions are far away from the vehicle. Operators must be able to stop the arm at all times.
- AUTOMIZER RIGHT-HAND™ vehicles are primarily designed to be operated *by only one person.* However, if Labrie Enviroquip Group customers elect to operate the vehicle with more than one worker, additional safety items shall be installed *to protect the co-worker* from hazardous situations.

IMPORTANT: In such cases, Labrie Enviroquip Group *must be informed* of every and all units that will be operated by more than one worker. Labrie Enviroquip Group will then determine and supply, at the customer's expense, the required safety items. For additional information, please contact Labrie*Plus* at 1-877-831-8250 in Canada or 1-800-231-2771 in the U.S.

- Do not operate this vehicle if there are any signs of damage or incomplete repairs.
- Report any doubts that you might have and any safety service requirements regarding this vehicle to a supervisor.
- When removing nylon locknuts, *always* replace them by new ones.
- *Never* drive this vehicle with the tailgate unlocked.
- For any work (including cleaning and inspecting) that has to be done between the body and the chassis, *always* use the body safety prop. Also, the vehicle *must* be on level ground.
- Before opening and closing the tailgate and/or raising the body, make sure that there is no one behind the vehicle.

- Do not get into the hopper compartment or try to repair anything behind the packer when it is moving or when the hydraulic pump is still running. Personnel authorized to get into the hopper *must* first lock out and tag out the vehicle, as required by the employer. For more information, see *Locking Out and Tagging Out the Vehicle* on page 32.
- *Never* stand near or underneath a raised arm or grabber, since no arm cylinder is equipped with a holding valve.
- *Never, under any circumstances* (maintenance or otherwise), stand underneath a *loaded* body.

Warning! ⚠

Do not operate the automated arm until you have been fully trained, and have read and understood the Operator and Maintenance Manuals supplied with this unit.

Warning! ⚠

Make sure that all people and obstructions are sufficiently cleared from the automated arm before moving it. Failure to do so may result in unit and/or property damages, personal injury or death.

Warning! ⚠

Make sure there is enough clearance between raised container and overhead power lines. The automated arm or the container must not come in direct contact with the electrical cables for the power to go through the unit. If the unit comes in contact with a power line, stay in the cab and keep away from any metal parts.

Danger! ⚠

Never drive this vehicle if the lifting arm is not fully retracted to its home position. The unit would be simply too wide to be driven. Failure to fully retract the arm will result in unit and /or property damage, severe injury or even death. Warning red lights on dashboard flash when the arm is not completely retracted to its home position.

Warning! ⚠

Remove all control levers from the proportional valve. These control levers should be used for maintenance purposes only.

Warning! ⚠

Units with two driving positions: Prior to changing driving position, stop the vehicle, apply parking brake, push emergency button and stop the engine. Properly adjust mirrors and set driving control switches including arm control joystick (if applicable) to the new driving position before starting the engine. This will ensure that the automated arm is completely inoperative.

Fire

The employer must inform and train all personnel on the measures that must be taken in case of a vehicle and/or loaded body catching fire.

Anytime a loaded vehicle is *brought inside a garage,* fire extinguishers shall be close at hand.

The employer must also inform employees of an appropriate place to unload the body near the maintenance facility (preferably away from traffic, surface drains, and ditches).

AUTOMIZER RIGHT-HAND™ vehicles are equipped with a 5-lb fire extinguisher, which is located inside the cab. A 20-lb fire extinguisher may also be installed as an option. Each fire extinguisher must be checked regularly by qualified personnel.

Figure 2-1 20-lb fire extinguisher (left); 5-lb fire extinguisher (right)



Safety Kits

A first aid kit, a flare kit and a triangle kit are provided with the truck.

Location of Safety and Informative Decals

Pay careful attention to all safety, warning and informative decals while working in and around the AUTOMIZER RIGHT-HAND™. Keep your decals clean and in good condition at all times. For replacement decals, please call Labrie*Plus*. Decals may vary from one unit to another depending on the options and features installed on the unit. The following is an illustrated list of decals, but not limited to.

Decals on Body



84459

84458 - English/French



47304

120989 - English/Spanish
79846 - English/French



47312

84011 - English/Spanish
84010 - English/French



47260

120977 - English/Spanish
79833 - English/French



84470

84469 - English/French



43800

84039 - English/Spanish
79867 - English/French



84468

84467 - English/French



47262

120978 - English/Spanish
79834 - English/French



47270

120981 - English/Spanish
79837 - English/French



47280

120982 - English/Spanish
79841 - English/French



47282

120983 - English/Spanish
79842 - English/French



47286

84054 - English/Spanish
79844 - English/French



47308

84059 - English/Spanish
79847 - English/French



47314

84060 - English/Spanish
79848 - English/French



47348

84015 - English/Spanish
84014 - English/French



47350

84072 - English/Spanish
79850 - English/French



47352

84073 - English/Spanish
79851 - English/French



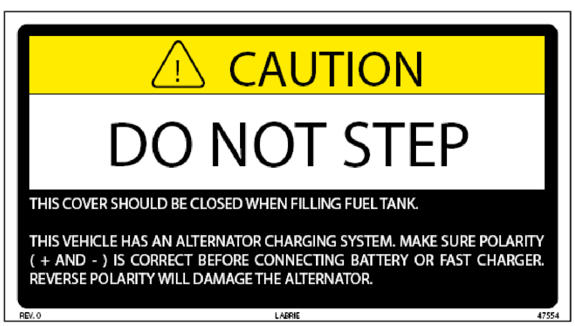
47422

121033 - English/Spanish
79853 - English/French



47424

84077 - English/Spanish
79854 - English/French



47554

79768 - English/Spanish
79856 - English/French



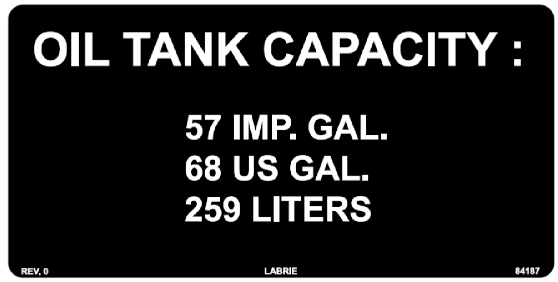
47562

47795 - English/Spanish
79776 - English/French



79781

79782 - English/Spanish
84099 - English/French



84187
84485 - English/French/Spanish



84321

159775 - English/Spanish
84322 - French



47564



32411
Optional



47256

84419 - Spanish
159761 - French

Optional

EMERGENCY PROCEDURE

- Stop the engine.
- Close the manual shut off valve.
- Call maintenance personnel or advise your supervisor.
- The vehicle should be inspected by qualified personnel before restarting the engine.
- If the vehicle is parked inside a facility, ventilation of the building should be performed.
- Move the vehicle outside for inspection.
- See CNG Fuel Supplement Manual for leak detection procedure.

REFUELING PROCEDURE

- Refueling of this vehicle must be done by QUALIFIED and AUTHORIZED personnel only.
- Always apply the parking brake.
- Stop the truck's engine.
- At the dispenser, follow the mandatory safety and filling procedures of the station. Do not over pressure gas containers (Max. 3600PSI).
- When finished re-install the dust cap on the filling port.

- Installation of tanks, fitting and natural gas line must be performed by a qualified mechanic with a valide certificate of the following: gas carburation technical certificate.
- WARNING
  Prior to performing repairs, refer to the manufacturer service manual regarding the depressurisation of the CNG system.

REV.1 LABRIE 97832

97832

84447 - Spanish
159759 - French

Optional

SHUT OFF VALVE LOCATED ON SUCTION LINE BEHIND THE HYDRAULIC TANK

REV.1 LABRIE 121349

121349

121350 - French

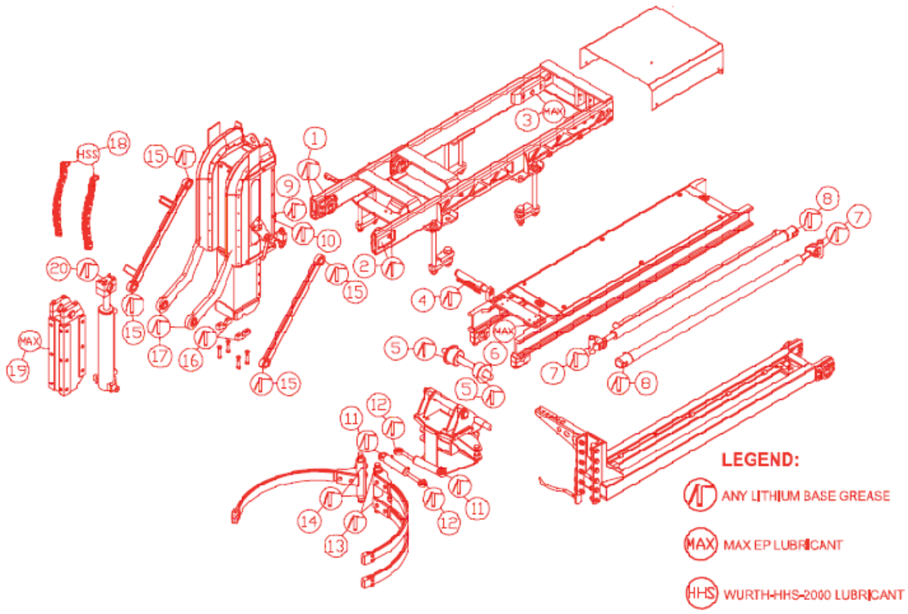
labrie

POSITION	AU	EX	FL	MM
1	TAILGATE CLOSE	TAILGATE CLOSE	TAILGATE CLOSE	TAILGATE CLOSE
2	TAILGATE OPEN	TAILGATE OPEN	TAILGATE OPEN	TAILGATE OPEN
3	BODY RAISE	BODY RAISE	TOP DOOR CLOSE	BODY RAISE
4	BODY LOWER	BODY LOWER	TOP DOOR OPEN	BODY LOWER
5	N/A	CRUSHER PAN. RAISE	FORKS INCREASE	BOX LOCK
6	PACK	PACK	PACK	PACK
7	RETURN	RETURN	RETURN	RETURN
8	SPARE OUT 1	RH CRUSHER PAN. RAISE	ARMS UP OUT	DUAL PRESSURE
9	SPARE IN 1	NOT USED	ARMS UP IN	NOT USED
10	CHUTE LOCK	RH CRUSHER PAN. LOWER	JOYSTICK CUT OUT	PIVOT FLOAT
11	N/A	CRUSHER PAN. LOWER	FORKS DECREASE	BOX UNLOCK

REV. 1 LABRIE 84482

84482

LUBRICATION CHART RIGHT-HAND ARM



LUBRICATION CHART*		
NO.	DESCRIPTION	FREQUENCY
1	LEFT OUTTER RAIL ROLLER BEARING	WEEKLY
2	RIGHT OUTTER RAIL ROLLER BEARING	WEEKLY
3	OUTTER RAIL TEFLON GUIDE (MAX EP)	WEEKLY
4	CENTER RAIL HOSE HOLDER	MONTHLY
5	CENTRAL RAIL ROLLER BEARING	WEEKLY
6	CENTRAL RAIL TEFLON GUIDE (MAX EP)	WEEKLY
7	IN / OUT CYLINDER ROD END	WEEKLY
8	IN / OUT CYLINDER BUSHING	WEEKLY
9	LEFT INNER RAIL ROLLER BEARING	WEEKLY
10	RIGHT INNER RAIL ROLLER BEARING	WEEKLY
11	GRIPPER CYLINDER BUSHING	WEEKLY
12	GRIPPER CYLINDER ROD END	WEEKLY
13	GRIPPER RIGHT BLADE PIVOT	WEEKLY
14	GRIPPER LEFT BLADE PIVOT	WEEKLY
15	GRIPPER LEVELING BARS	WEEKLY
16	OUTTER POST BOTTOM PLATES	WEEKLY
17	GRIPPER UP / DWON ARM	WEEKLY
18	LOAD CHAIN (WURTH-HHS-2000)	WEEKLY
19	INNER POST TEFLON PLATE (MAX EP)	WEEKLY
20	UP / DOWN CYLINDER ROD END	WEEKLY

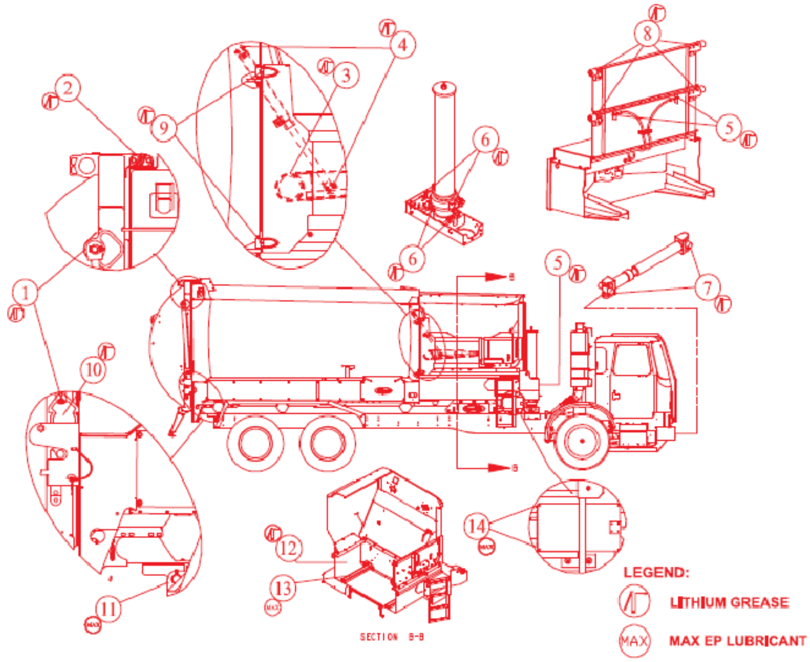
USE ALL PURPOSE COMMERCIAL LITHIUM BASE GREASE.
NEVER APPLY GREASE ON THE WEAR PLATES; USE MAX EP LUBRICANT OR DISH WASHING SOAP.

REV. 3 LABRIE 47702

47702

159772 - Spanish
47703 - French

LUBRICATION CHART - AUTOMIZER



LUBRICATION CHART *

NO.	DESCRIPTION	FREQUENCY
1	TAILGATE CYLINDER PINS	WEEKLY
2	TAILGATE HINGES	WEEKLY
3	CRUSHER PANEL HINGES	WEEKLY
4	CRUSHER PANEL CYLINDER PINS	WEEKLY
5	PACKER CYLINDER PINS	TWICE A WEEK
6	BODY HOIST PINS	WEEKLY
7	PUMP DRIVE SHAFT "U" JOINT	TWICE A WEEK
8	FOLLOWER PANEL ROLLERS	TWICE A WEEK
9	HOPPER DOOR HINGES	WEEKLY
10	TAILGATE LOCKING MECHANISM	WEEKLY
11	BODY HINGES	WEEKLY
12	HOPPER SIDE WALLS	WEEKLY
13	FLOOR GUIDES	WEEKLY
14	SUMP BOX HINGES	WEEKLY

*SEE EXPERT (t) 2000 MAINTENANCE MANUAL FOR PROPER LUBRICANT

REV. 0 LABRIE 84272

84272

159782 - Spanish
84336 - French

Decals on Tailgate

32307



47266

120973 - English/Spanish
79835 - English/French



47268

120974 - English/Spanish
79836 - English/French



32414A 84418 - Spanish Optional
159760 - French

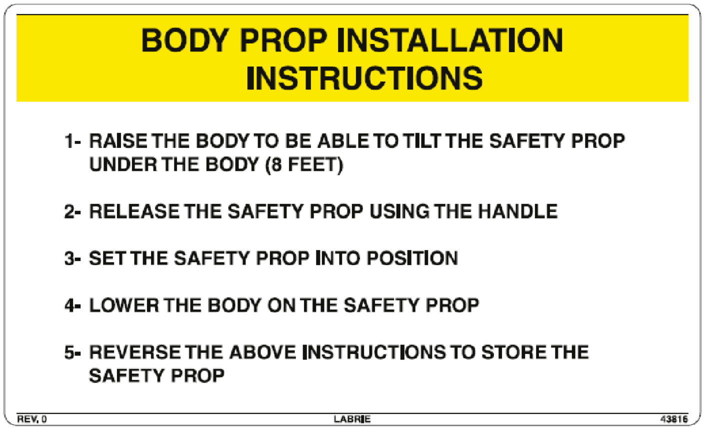


47274

47777 - English/Spanish
79839 - English/French

Optional

Decals outside Cab



43816

84040 - English/Spanish
79865 - English/French



47352

84073 - English/Spanish
79851 - English/French



47350

84072 - English/Spanish
79850 - English/French



47286

84054 - English/Spanish
79844 - English/French

Decals inside Cab



43874
159751 - English/Spanish
79826 - English/French



43880
47770 - English/Spanish
79828 - English/French



47451
84497 - English/Spanish
84026 - English/French



47312
84011 - English/Spanish
84010 - English/French



43790
84304 - English/Spanish
79818 - English/French



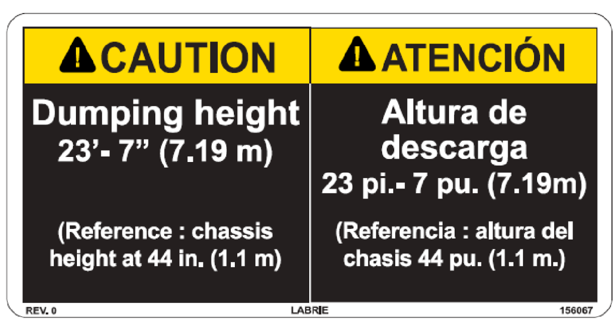
47276
84303 - English/Spanish
79840 - English/French



47440
84078 - English/Spanish
79855 - English/French



156066
159812 - English/French

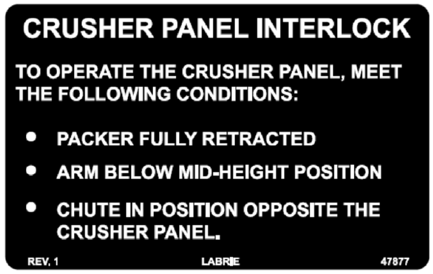


156067
159813 - English/French



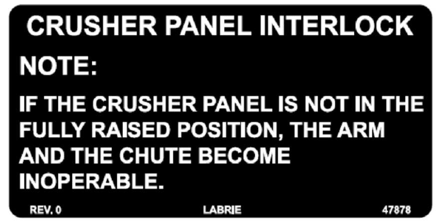
43882

84491 - English/Spanish
84009 - English/French



47877 Optional

159776 - English/Spanish
84030 - English/French



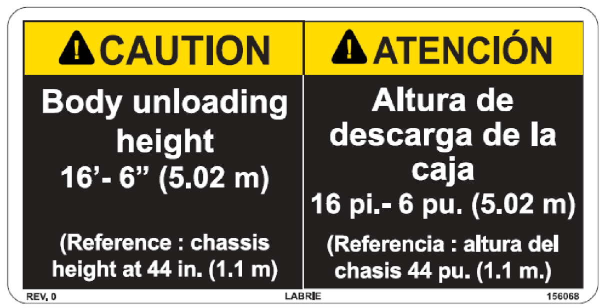
47878 Optional

159777 - English/Spanish
84029 - English/French



43764

84025 - English/Spanish
84024 - English/French



156068

159814 - English/French



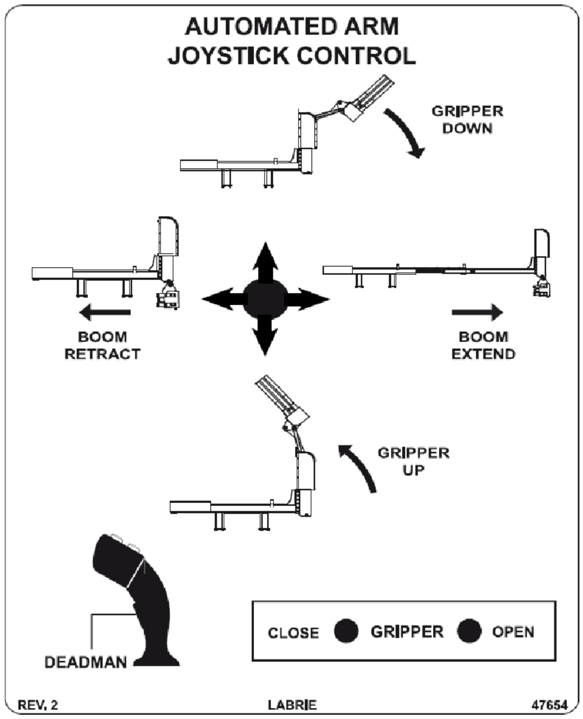
84189

84188 - English/French



47610

84021 - English/Spanish
84020 - English/French



47654

159774 - English/Spanish
84016 - English/French



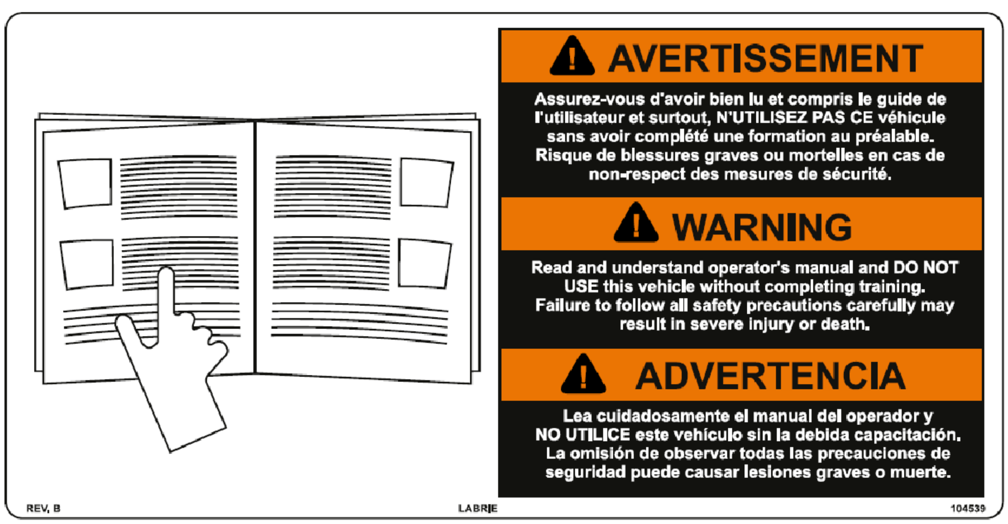
43850

84001 - English/Spanish
79822 - English/French



43910

84013 - English/Spanish
84012 - English/French



104539 84032 - English/Spanish
84031 - English/French



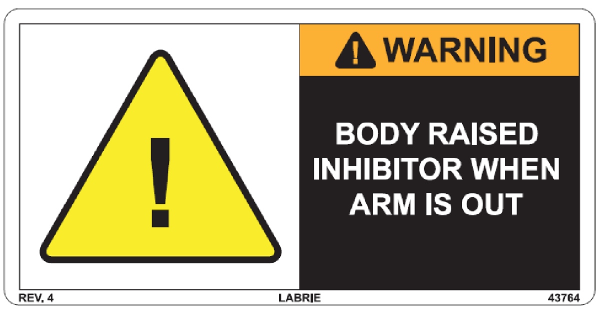
47284

120980 - English/Spanish
79843 - English/French



43972

84148 - English/Spanish
79831 - English/French



43764_R4



43794

84147 - English/Spanish
79819 - English/French



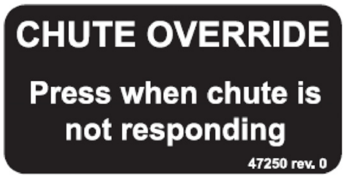
43798

79821 - English/French



43856

79823 - English/French



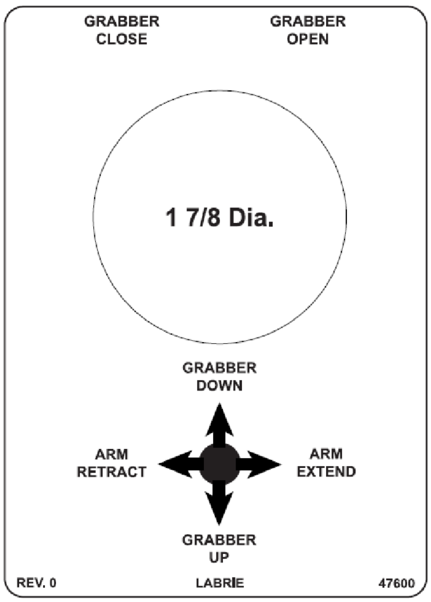
47250 Optional

47251 - French



47998

84018 - English/French



47600

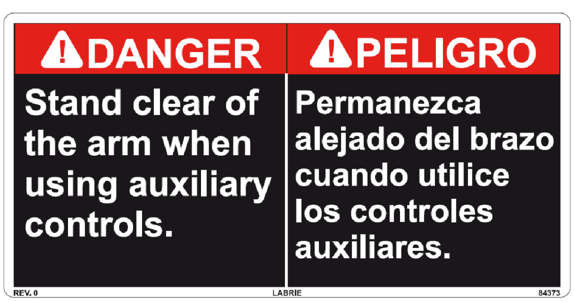
47601 - French



43892 Optional

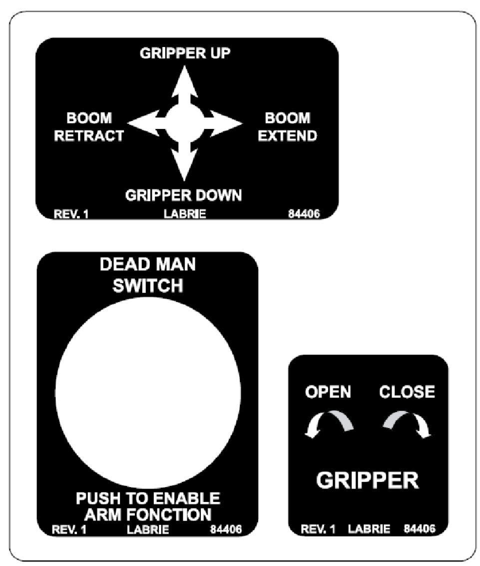
84158 - English/Spanish

84157 - English/French



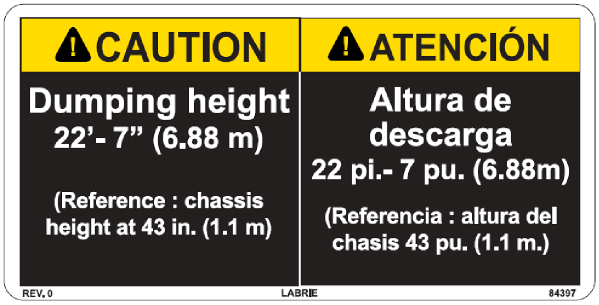
84373

84372 - English/French



84406

84407 - French



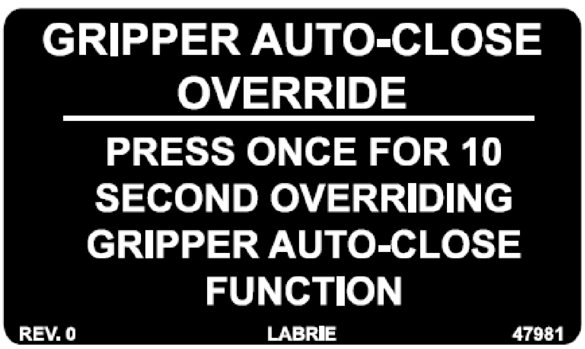
84397

84396 - English/French



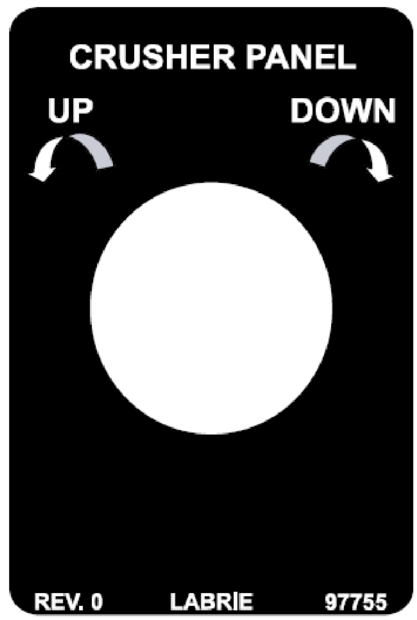
43792

84023 - English/Spanish
84022 - English/French



47981

159773 - English/Spanish
79914 - French

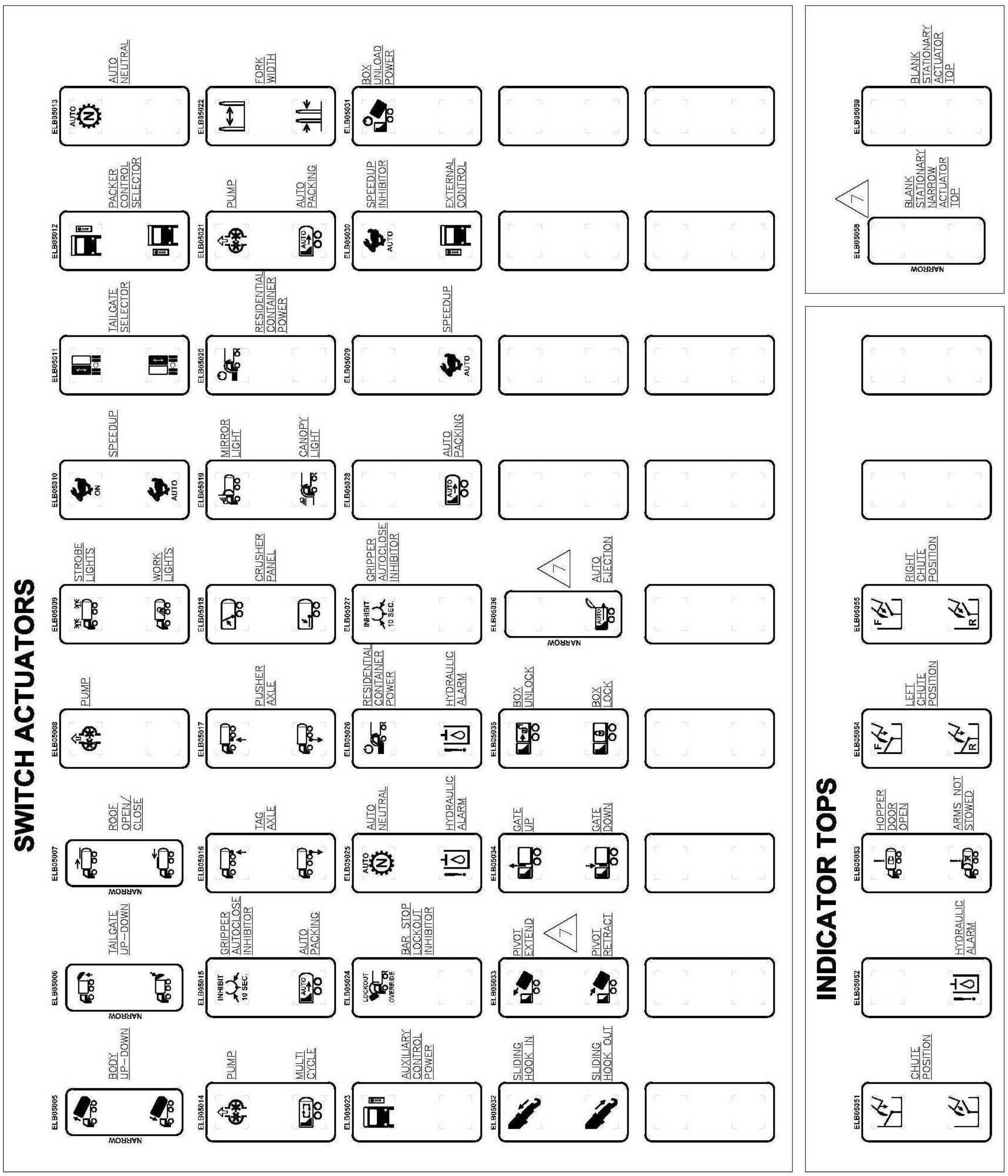


97755

159771 - English/Spanish
97777 - English/French

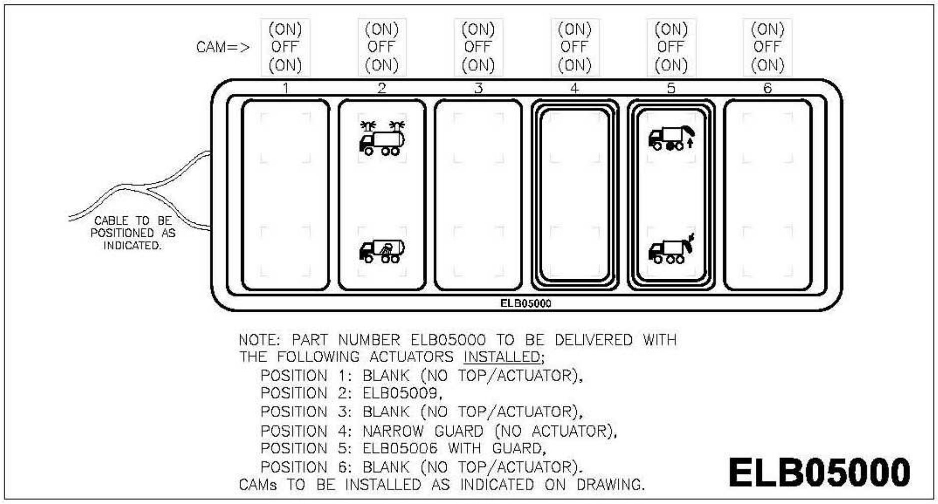
Multiplex Switch Actuators (1)

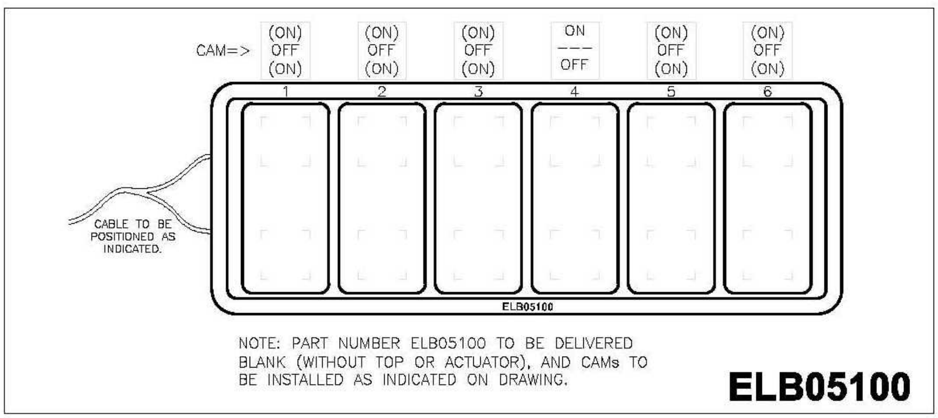
NOTE: Multiplex switch actuators and their location on the rocker panel vary according to the options installed on the unit.

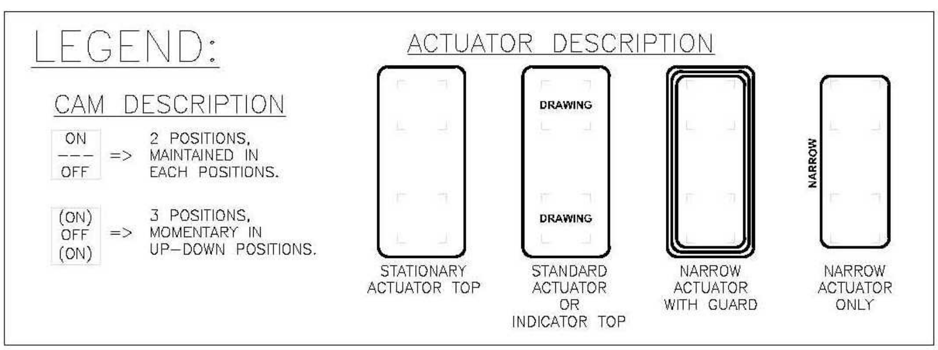


Multiplex Switch Actuators (2)

NOTE: This illustration and the preceding one were taken from the PDF file no 159535.







NOTE: 1- All symbols to be negative lens.
2- Electronic file for the symbols available on request from Labrie Enviroquip Group only.

Safety Features

Back Up Alarm

The back up alarm sounds when the truck is in reverse or when the hopper is being raised.

Body Safety Prop

Safety props ensure that heavy body parts will not move inadvertently.

Setting the Body Safety Prop
The body safety prop ensures that an ***empty*** body will not lower when you are working underneath it.

Danger!

Always set the body safety prop when performing maintenance underneath a raised body. Failure to do so may result in severe injury, or even death.

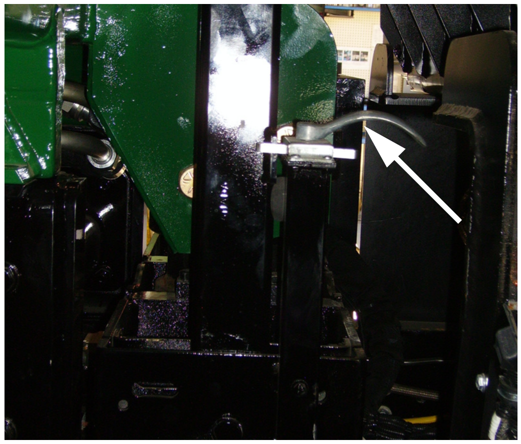
Figure 2-2 Body safety prop



To set the body safety prop:

1. Make sure that there is enough clearance above the body to raise it safely.
2. Start the engine.
3. Raise the body until the safety prop is free to tilt under it.
4. Release the safety prop using the safety prop handle and position it adequately.

Figure 2-3 Safety prop handle



5. Lower the body until it rests on the safety prop.
6. Lock out and tag out the vehicle (see *Locking Out and Tagging Out the Vehicle* on page 32).

You can now work safely underneath the body.

Putting the Body Safety Prop Back in Place

To put the body safety prop back in place:

1. Make sure that there is enough clearance above the body to raise it safely.
2. Start the engine.
3. Raise the body until the safety prop can move freely.
4. Put the safety prop back in its place.
5. Lower the body.

Tailgate Safety Prop

The tailgate safety prop is used to support and keep the tailgate open during inspection or maintenance procedures. It is mandatory to set the safety prop every time the tailgate is open for such purposes.

IMPORTANT: Make sure that the body is empty before installing safety props.

Danger! The tailgate safety prop shall be set each time the tailgate is open for inspection and maintenance purposes.

Setting the Tailgate Safety Prop

To set the tailgate safety prop:

1. Make sure that the body is empty.
2. Remove the tailgate-locking mechanism safety pins.

Figure 2-4 Safety pin



3. Start the engine.
4. Turn on the pump.

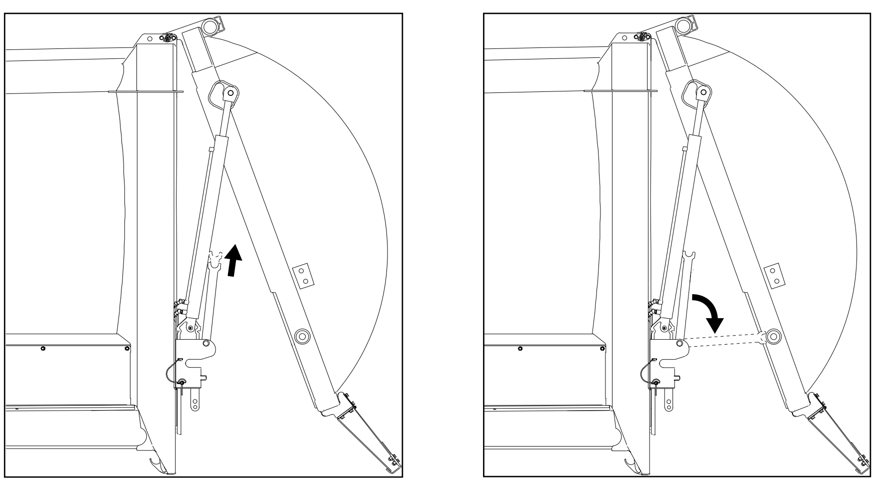
Danger!

Prior to raising the tailgate, make sure that no one is standing behind the vehicle and that the body is empty.

---

5. With the Tailgate Up Switch on the cab rocker panel, raise the tailgate about 3 feet (enough to raise the safety prop).
6. Pull the safety prop upward and set it down (see Figure 2-5).

Figure 2-5 Pulling the safety prop upward (left) and setting it down (right)



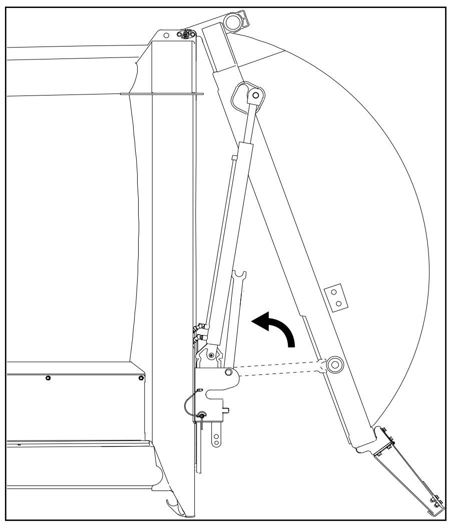
7. Lower the tailgate onto the safety prop using the Tailgate Down Switch.

Putting the Tailgate Safety Prop Back in Place

To put the tailgate safety prop back in its home position:

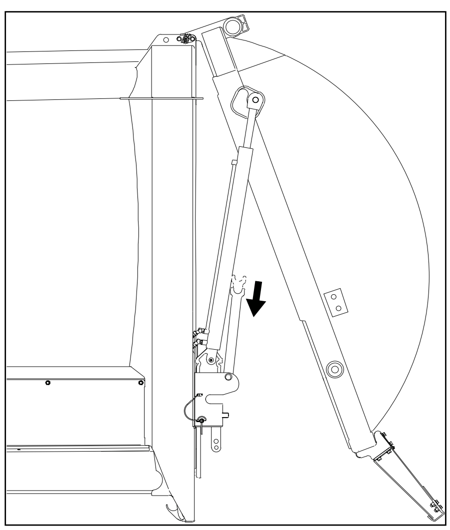
1. Start the engine.
2. Turn on the pump.
3. Raise the tailgate by about 3 feet.
4. Raise the tailgate safety prop.

Figure 2-6 Raising the tailgate safety prop



5. Release your grip on the safety prop to set it in its home position.

Figure 2-7 Setting the safety prop in its home position



6. With the Tailgate Down Switch on the cab rocker panel, completely close the tailgate.
   The TAILGATE OPEN light indicator should turn off.

7. Put the safety pins back in place.

Camera System (optional)

AUTOMIZER RIGHT-HAND™ units can be equipped with up to four (4) cameras. The following are the locations where they can be installed on the truck: inside the hopper (Figure 2-8, left), on the tailgate (see Figure 2-8, right), on the outside of the right hopper wall, and on the left-hand side mirror.

The operator can switch from one camera to the other thanks to a selector switch located on the 7” LCD color monitor installed in the cab.

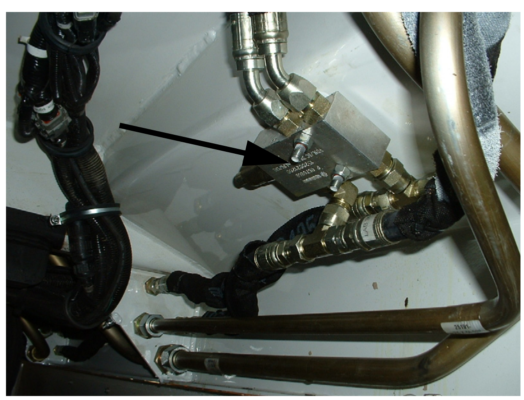
Refer to the camera manufacturer’s manual for more information.

Figure 2-8 Camera inside hopper (left) and on tailgate (right)



Tailgate Holding Valve

Located under the rear section of the body, this holding valve ensures that the tailgate will not open during the packing cycle.

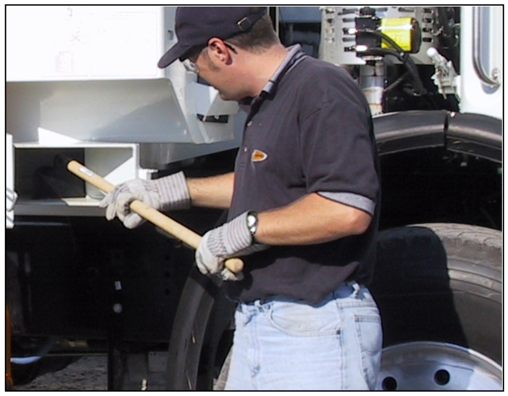


Cleanliness

Cleanliness is part of safety. Ensure that the equipment works properly by removing any compacted garbage in the packer area after each body unloading.

Clean all the lights and safety decals so you and the surrounding pedestrians and drivers will be aware of the truck at all times. Use the hoe to rake dirt out of clean-out traps on each side of the vehicle.

Figure 2-9 Removing debris through the clean-out trap



Locking Out and Tagging Out the Vehicle

For any inspection, repair or general maintenance being done on the vehicle, whether on the road or at the shop, it is the employer's responsibility to establish and see to the application of a proper lockout and tagout procedure.

To lock out and tag out an AUTOMIZER RIGHT-HAND™ vehicle:

1. Park the vehicle on safe level ground, and apply the parking brake (see Figure 2-10).

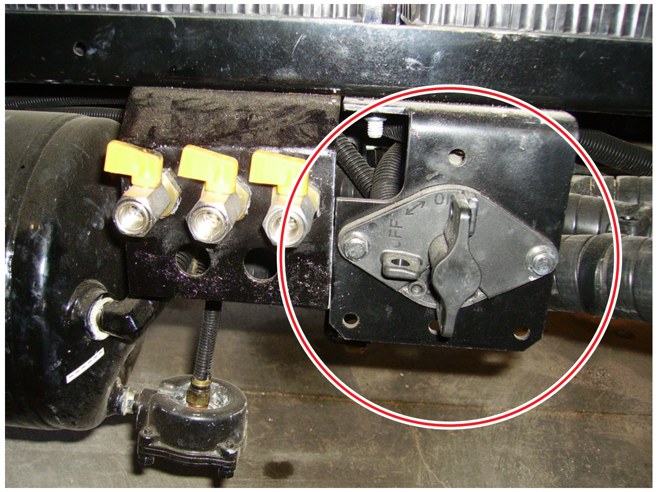
Figure 2-10 Parking brake sign



2. Make sure that the body is completely unloaded.
3. Switch off the hydraulic pump.
4. Turn off the engine, remove the key from the ignition, store it in a safe and controlled area (preferably on yourself), and tape over the ignition switch.
5. Turn off and lock the master switch.
6. Chock all wheels.

IMPORTANT: The battery set of the AUTOMIZER RIGHT-HAND™ is equipped with a master switch (see Figure 2-11) that must be turned off.

Figure 2-11 Master switch



7. Put an “OFF SERVICE” tag on the driver’s wheel and on the front windshield.
8. Use safety props to block any system that could move by gravity (open tailgate, raised body, etc.).
9. Drain all air tanks.
10. Verify and inspect any security device and/or mechanism to make sure that there is no bypass and that they are all functional.

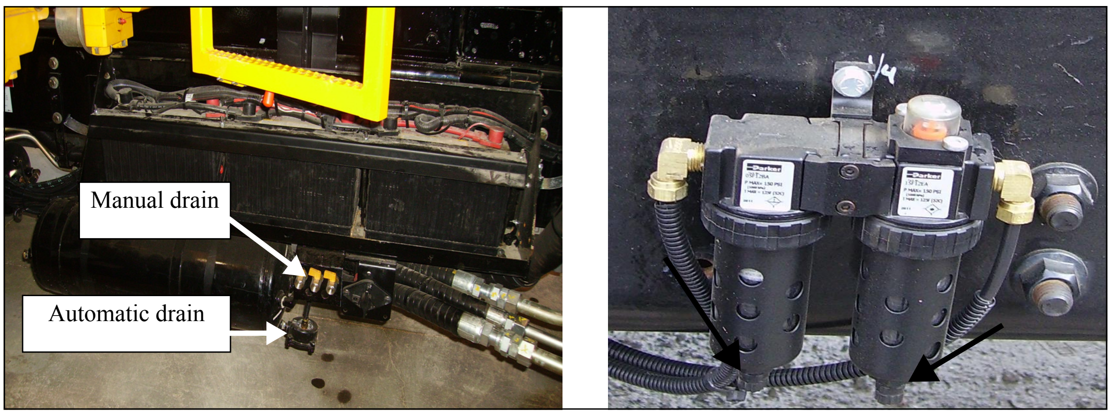
Shutting Down the Vehicle

If the vehicle has to be stored for an extended period of time, follow the chassis manufacturer's shutdown and maintenance requirements.

Also:

1. Park the vehicle on a hard level surface, and apply the parking brake (see Figure 2-10).
2. Make sure that all moving parts are in their home position (tailgate, arm, hopper, packer, etc.).
3. Turn off, in sequence, the hydraulic pump (see Figure 2-14), the electrical system, the engine and the master switch (see Figure 2-11).
4. Drain all air tanks.

Figure 2-12 Drain valves on air tank (left) and water trap (right)

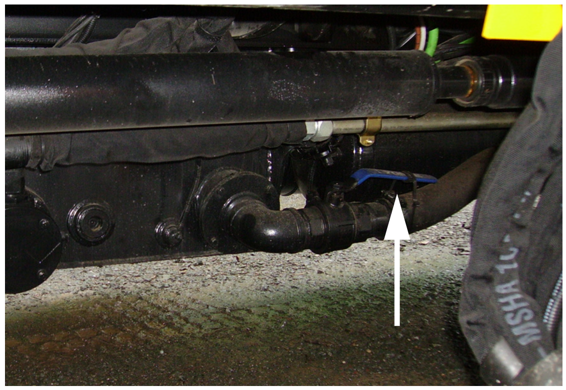


Prior to Start Up

Before starting the vehicle:

1. Make sure no system will engage and/or start to operate as you start the engine.
2. Make sure the shut-off valve on the hydraulic tank is fully open before starting the vehicle (see Figure 2-13).

Figure 2-13 Suction line shut-off valve



NOTE: The hydraulic tank model may vary according to the options installed on the vehicle.

Warning! Failure to fully open the main valve will cause immediate damage to the pump, even if the pump is turned off.

3. Engage the hydraulic system by turning on the pump switch (see Figure 2-14).

Figure 2-14 Hydraulic pump ON/OFF rocker switch



Once the engine is started, wait for air pressure to build up to *at least* 70 psi.

IMPORTANT: Do not operate or move the vehicle until air pressure has reached 70 psi.

Driving the Vehicle

The AUTOMIZER RIGHT-HAND™ may be equipped with two (2) steering wheels, one on the left and one on the right. The right-hand side steering wheel makes waste collection easier by a single person. It is provided along with an accelerator pedal, a foot brake pedal, a turn signal control and a horn. Before using the right-hand side driving position make sure that all controls are properly set.

Driving Speed

If the cab of the vehicle has been modified by Labrie Enviroquip Group (right-hand side driving position) for door-to-door waste collection, the maximum speed limit while driving at the right-hand side is, if permitted, 20 mph (32 km/h). Therefore, it is recommended to drive on the left-hand side for any long distance driving (if the truck is equipped with a left-hand side driving position).

Figure 2-15 Cab modified by Labrie



NOTE: If the cab has been modified by the chassis manufacturer, the operator MUST follow the chassis manufacturer's recommandations.

Warning! If the vehicle has to be parked for an extended period of time, always apply the parking brake (see Figure 2-15).

Right-Hand Side Driving Position

The following procedure applies **ONLY** to cabs that had been modified by Labrie Enviroquip Group. It must be followed at the beginning, but also at the end of the collection route in order to revert to the left-hand side driving position.

NOTE: This procedure applies only to vehicles that had been modified by Labrie Enviroquip Group and that are equipped with dual driving position. Some units are designed only with a single driving position.

If the cab has been modified by the chassis manufacturer, the operator **MUST** ignore the following procedure and rather follow the chassis manufacturer's recommandations.

Before using the right-hand side driving position, do the following:

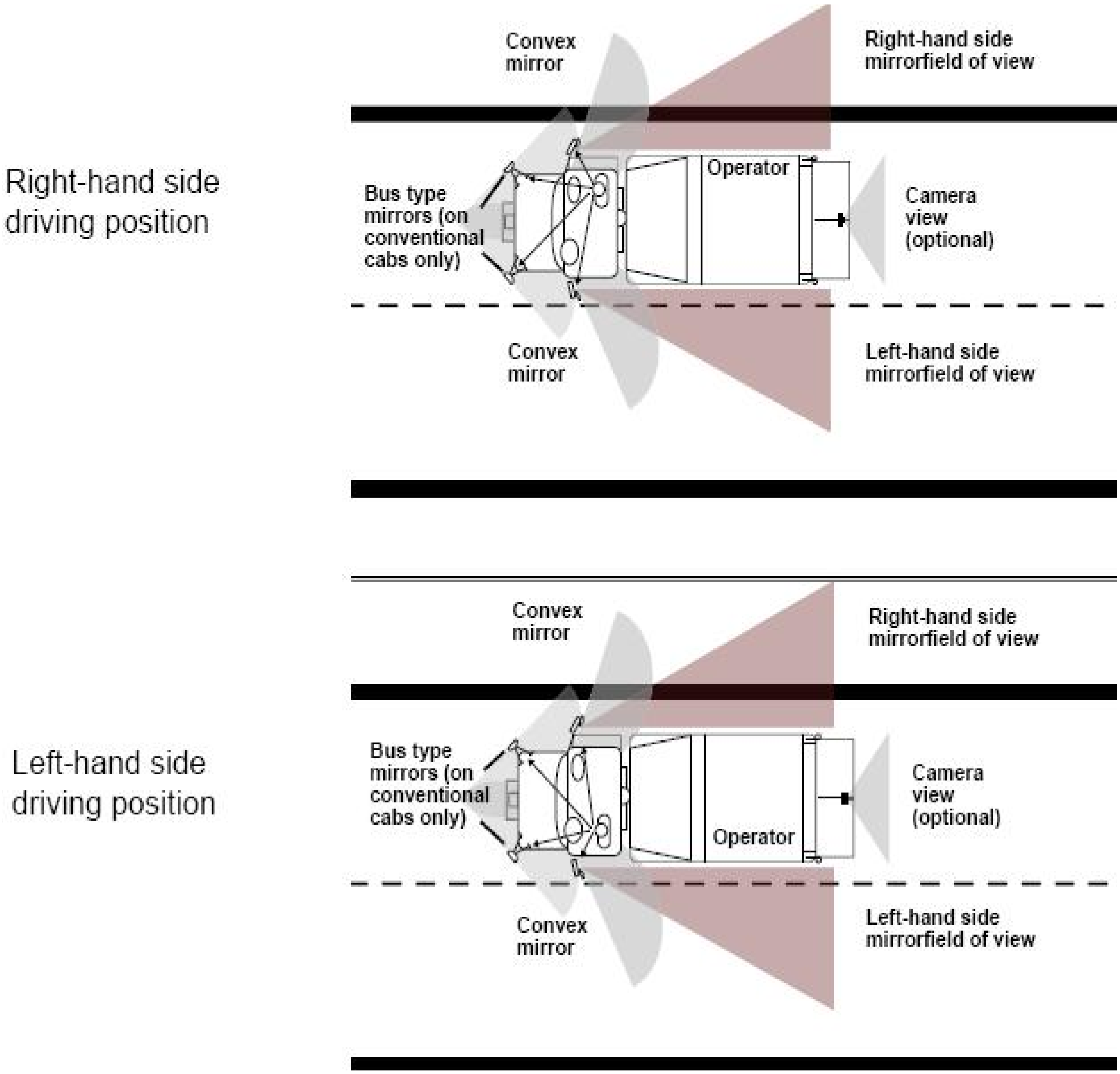
1. Drive the vehicle to the beginning of the collection route with the left-hand side steering wheel.
2. Stop the vehicle and apply the parking brake.
3. Press the emergency stop button on the packer control station.
4. Turn off the engine.
5. Move to the right-hand side driving position.
6. Shift the driving position switch to the right. All the electrical accessories of the right-hand side driving position are then enabled.

Figure 2-16 Driving position switch



7. Enable the right-hand side joystick by moving the joystick selector switch to the right (if installed).
8. Adjust mirrors properly (see Figure 2-17).

Figure 2-17 Adjusting mirrors



3

Controls and Indicators

The AUTOMIZER RIGHT-HAND™ has a series of controls and indicators that allow easier operation of the different functions that come with the vehicle. These controls and indicators are mainly located on the cab rocker console and on the dashboard.

Labrie's Multiplexed System

Labrie has equipped your AUTOMIZER RIGHT-HAND™ unit with a CAN bus-based multiplexed system, which integrates a display monitor, a rocker console, a joystick, and a set of electronic controllers. This whole system has been designed to help you operate your unit in an efficient and easy way. Labrie's multiplexed system is reliable and safe and it requires less wiring harnesses to operate. It can also monitor various function status of the body and display warning and caution messages.

Through its display monitor (see Figure 3-1), Labrie's multiplexed system informs you of the various functions being carried out or of any malfunctions. Various caution and warning messages can be displayed on the monitor, depending on the seriousness of the situation. Messages in yellow blocks indicate that caution should be used; messages in red blocks indicate a warning situation that must be dealt quickly.

Figure 3-1 Display monitor



Each time the operator turns the ignition key on, a complete bit test of the multiplexed system is conducted. This test takes about 10 seconds to complete.

NOTE: A flashing green light on the monitor indicates that the display power is on. This light should be blinking steadily at 2 Hz during normal operation. If it blinks at a faster rate, it is a sign of a problem with the monitor. A flashing red light on the monitor is also a sign of a problem. Call Labrie*Plus* for support.

The logo of Labrie Enviroquip Group appears momentarily on the display monitor at the start of the system (see Figure 3-2).

Figure 3-2 Labrie logo on the display monitor



NOTE: If the Welcome Screen with the Labrie logo stays continually displayed, there may be a communication problem between the monitor and the master control module. Refer this problem to the maintenance personnel.

NOTE: The display monitor works even if the engine is not started. It only needs electricity to function. However, if you start the engine, the monitor will reboot to reflect the changes caused by the starting of the truck.

Cart Counter (optional)

The next page that comes up after the Welcome Screen is the Cart Counter Page (see Figure 3-3). On this page you will see the number of carts that have been emptied so far. If your vehicle is equipped with two arms, the number of carts emptied is shown for each of these arms (right and left counters).

Figure 3-3 Cart counter

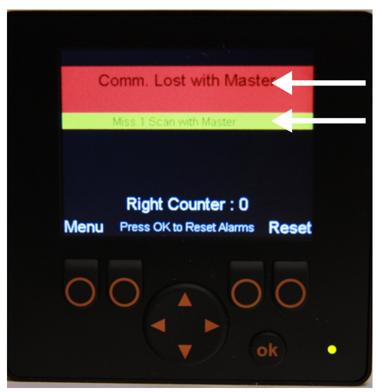


Press the far right button to reset the counter display to zero.

Warning and Caution Messages

On the display monitor, messages in yellow blocks indicate that caution should be used and messages in red blocks indicate a warning situation that must be dealt quickly.

Figure 3-4 Warning and caution messages on monitor



See Table 1 for a list of warning and caution messages. Please note that this list is not exhaustive.

Table 1 Warning messages

Warning and Caution Messages	Solution
Arm Up:Chute Bad Position	Set Chute to Correct Position
Arm Up:Crusher Not Raised	Raise Crusher Panel
Arm:Auxiliary Deadman ON	Release Auxiliary Deadman
Arm:Body Raised	Lower Body

Table 1 **Warning messages (cont'd)**

Warning and Caution Messages	Solution
Arm:Hopper Door Not Close	Close Hopper Door
Arm:Pump Not Started	Engage Pump
Arm:Tailgate Unlocked	Lock Tailgate
AutoDump:Cab EStop	Pull Out Cab EStop Button
AutoDump:Pump Not Started	Engage Pump
Body:Pump Not Started	Engage Pump
Buzzer:Arm Not Stow	Retract Arm to Stowed Position
Buzzer:Body Raised	Lower Body
Buzzer:TailGate Unlocked	Lock Tailgate
Chute:Arm Too High	Lower Arm
Chute:Crusher Not Up	Raise Crusher Panel
Chute:Pump Not Started	Engage Pump
Crusher:Arm Too High	Lower Arm
Crusher:Chute Bad Position	Set Chute to Correct Position
Crusher:Hopper Door Not Closed	Close Hopper Door
Crusher:Packer Not Retracted	Retract Packer
Crusher:Pump Not Started	Engage Pump
ESTOP:Aux Cab EStop	Pull Out Aux Cab EStop Button
ESTOP:Cab EStop	Pull Out Cab EStop Button
FullEject:Cab EStop	Pull Out Cab EStop Button
FullEject:Pump Not Started	Engage Pump
Gripper Open:Arm Too High	Lower Arm
High Hydraulic Oil Temp.	Turn Off Engine and Refer to your Maintenance Personnel
Low Hydraulic Oil	Add Hydraulic Oil
Miss 1 Scan with Master	Refer to Maintenance Personnel or Labrie*Plus*

Table 1 Warning messages (cont'd)

Warning and Caution Messages	Solution
Packer Extend:Air Weigh Signal	Unload Body
Packer:Already Extended	Refer to Maintenance Personnel or Labrie*Plus*
Packer:Already Retracted	Refer to Maintenance Personnel or Labrie*Plus*
Packer:Pump Not Started	Engage Pump
Packer:Tailgate Not Open	Open Tailgate
Pump Not Started:Aux Cab Estop	Pull Out Aux Cab EStop Button
Pump Not Started:Cab EStop	Pull Out Cab EStop Button
Pump Not Started:Hopper Door Not Closed	Close Hopper Door
Pump Not Started:Main Air Pressure	Let the Air Build Up to Required Pressure
Pump Not Started:RPM to High	Lower Engine Speed Below 900 RPM
Pump:Aux. AutoDump Switch ON	Release Aux. AutoDump Switch prior to Engaging Pump
Pump:Aux. ChuteToLeft Switch ON	Release Aux. ChuteToLeft Switch prior to Engaging Pump
Pump:Aux. ChuteToRight Switch ON	Release Aux. ChuteToRight Switch prior to Engaging Pump
Pump:Aux. CloseGripper Switch ON	Release Aux. CloseGripper Switch prior to Engaging Pump
Pump:Aux. Deadman Switch ON	Release Aux. Deadman Switch prior to Engaging Pump
Pump:Aux. OpenGripper Switch ON	Release Aux. OpenGripper Switch prior to Engaging Pump
Pump:BodyLower Switch ON	Release BodyLower Switch prior to Engaging Pump
Pump:BodyRaise Switch ON	Release BodyRaiseSwitch prior to Engaging Pump

Table 1 Warning messages (cont'd)

Warning and Caution Messages	Solution
Pump:CrusherDown Switch ON	Release CrusherDown Switch prior to Engaging Pump
Pump:CrusherUp Switch ON	Release CrusherUp Switch prior to Engaging Pump
Pump:Hopper Door Not Close	Close Open Door
Pump:J1 AutoDump Switch ON	Release J1 AutoDump Switch prior to Engaging Pump
Pump:J1 ChuteToLeft Switch ON	Release J1 ChuteToLeft Switch prior to Engaging Pump
Pump:J1 ChuteToRight Switch ON	Release J1 ChuteToRight Switch prior to Engaging Pump
Pump:J1 CloseGripper Switch ON	Release J1 CloseGripper Switch prior to Engaging Pump
Pump:J1 Deadman Switch ON	Release J1 Deadman Switch prior to Engaging Pump
Pump:J1 OpenGripper Switch ON	Release J1 OpenGripper Switch prior to Engaging Pump
Pump:J2 AutoDump Switch ON	Release J2 AutoDump Switch prior to Engaging Pump
Pump:J2 ChuteToLeft Switch ON	Release J2 ChuteToLeft Switch prior to Engaging Pump
Pump:J2 ChuteToRight Switch ON	Release J2 ChuteToRight Switch prior to Engaging Pump
Pump:J2 CloseGripper Switch ON	Release J2 CloseGripper Switch prior to Engaging Pump
Pump:J2 Deadman Switch ON	Release J2 Deadman Switch prior to Engaging Pump
Pump:J2 OpenGripper Switch ON	Release J2 OpenGripper Switch prior to Engaging Pump
Pump:Packer Extend Switch ON	Release Packer Extend Switch prior to Engaging Pump
Pump:Packer Retract Switch ON	Release Packer Retract Switch prior to Engaging Pump

Table 1 Warning messages (cont'd)

Warning and Caution Messages	Solution
Pump:PTO or Trans. Not OK	Refer to Maintenance Personnel or Labrie*Plus*
Pump:RPM Too High	Lower Engine Speed Below 900 RPM
Pump:TailgateDown Switch ON	Release TailgateDown Switch prior to Engaging Pump
Pump:TailgateUp Switch ON	Release TailgateUp Switch prior to Engaging Pump
Raise Body:Arm Not Stow	Retract Arm to Stowed Position
Raise Body:Truck Moving	Bring Truck to a Standstill
Service Oil Filter #1	Replace Oil Filter #1
Service Oil Filter #2	Replace Oil Filter #2
TailGate Up:Truck Moving	Bring Truck to a Standstill
TailGate:Packer Not Retracted	Retract Packer
TailGate:Pump Not Started	Engage Pump
Wrong Driver Position	Change Driver Position Switch to Correct Position

Table 2 Error messages

Error Messages	Solution
Button Pack 12 is disconnected	Refer to Maintenance Personnel or Labrie*Plus*
Button Pack 13 is disconnected	Refer to Maintenance Personnel or Labrie*Plus*
Button Pack 14 is disconnected	Refer to Maintenance Personnel or Labrie*Plus*
Button Pack 15 is disconnected	Refer to Maintenance Personnel or Labrie*Plus*
CAN Error Level 1	Refer to Labrie*Plus*
CAN Error Level 2	Refer to Labrie*Plus*

Table 2 Error messages (cont'd)

Error Messages	Solution
CAN Error Level 3	Refer to Labrie*Plus*
Comm. Lost with Master	Refer to Maintenance Personnel or Labrie*Plus*
Module 11 is disconnected	Refer to Maintenance Personnel or Labrie*Plus*
Module 11 not Connected	Refer to Maintenance Personnel or Labrie*Plus*
Module 20 is disconnected	Refer to Maintenance Personnel or Labrie*Plus*
Module 20 not Connected	Refer to Maintenance Personnel or Labrie*Plus*
Module 30 is disconnected	Refer to Maintenance Personnel or Labrie*Plus*
Module 30 not Connected	Refer to Maintenance Personnel or Labrie*Plus*
Module 50 is disconnected	Refer to Maintenance Personnel or Labrie*Plus*
Module 50 not Connected	Refer to Maintenance Personnel or Labrie*Plus*
Module 60 is disconnected	Refer to Maintenance Personnel or Labrie*Plus*
Module 60 not Connected	Refer to Maintenance Personnel or Labrie*Plus*

Should the system issue a warning or a caution message, it will appear on the same page as the cart counter.

For example, if the following caution message "Pump Not Started: Main Air Pressure" is issued by the system, it will appear on the Cart Counter page of the display monitor. An action that could be taken by the operator, when faced with such a situation, would be to wait until the required main air pressure level is reached.

For a specific problem or condition that requires special attention, the multiplexed system can alert the operator to a possible cause, which appears in bold and in large print on the monitor screen (active cause). The operator should check if the problem stems from the highlighted or active cause. One possible cause is highlighted at a time. What is shown in light and small print in the lower part of the screen are causes that have already been dealt with (see Figure 3-5).

Figure 3-5 Example of a possible cause



NOTE: If the system detects a problem, a beep will sound and a message will appear on the display monitor.

Hydraulic Oil Temperature Indicator (optional)

This optional indicator, when provided, shows you the current hydraulic oil temperature. This indicator is found on the upper right-hand side corner of the screen.

Time and Date Indicator

A time and date indicator may be found on the upper left-hand side corner of the screen. The availability of this indicator is based on the chassis on which the body is mounted. If the chassis provides real-time clock information through J1939 bus, time and date will appear on the screen. To set the Time and Date indicator, go to the main menu and choose Time Adjust.

Main Menu

To access the main menu, press the far left button when the Cart Counter page is displayed.

When the Main Menu is displayed, you can have access to the following sections:

- Multicycle
- I/O Status
- Program Version
- Optional Item
- Time Adjust (available according to chassis)

Displayed in the lower center of the screen is an indicator that monitors traffic on the network. This indicator is called Network Load, and it shows values that reflect such traffic.

NOTE: The higher the network load value is, the heavier the traffic is on the network. Also, the lower the network load value is, the less the traffic is on the network.

To exit this page and return to the Cart Counter page, press “Esc”. To choose a section from the main menu, highlight the desired section using the up/down arrows and press the “OK” button.

Multicycle

The display monitor of Labrie’s multiplexed system is user-friendly. Say you want to change the multicycle settings of the packer. All you have to do is select MAIN MENU by pressing the corresponding button at the bottom left corner of the display monitor. From the displayed menu, choose the option SELECT THE NUMBER OF CYCLES. If need be, use the arrow to choose that option and press “OK”. The multicycle settings can be changed from two to eight cycles. Choose the desired number of cycles and press “OK”. It could not be easier!

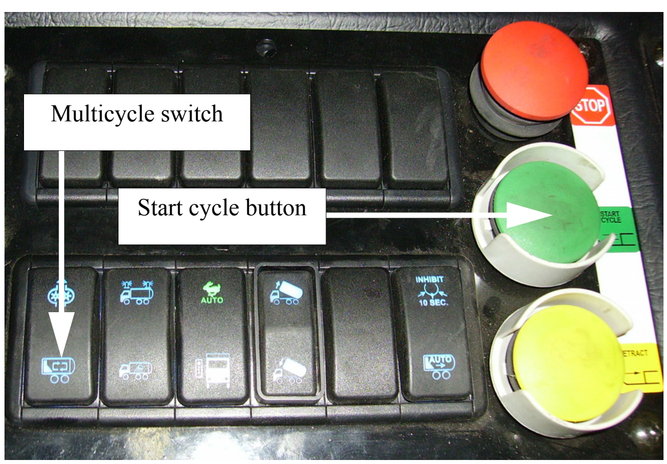
Figure 3-6 Multicycle page



NOTE: The packer multicycle function has been preset at the factory to carry out three cycles.

When the MULTICYCLE switch on the rocker console is on and the packer is activated, the packer will move according to the default number of cycles (that is 3) or to the number of cycles you chose (up to 8 cycles).

Figure 3-7 Rocker console



To test the new settings of the packer:

1. On the rocker console press the MULTICYCLE switch and the green START CYCLE button.

2. Once the packer has completed its cycles and come to a stop, switch off the hydraulic pump and turn off the engine.

The number of cycles needs to be adjusted depending on the type of collection route used by the vehicle. For example, in a residential area, if the houses are numerous and close one to another, it may be required to increase the number of cycles. This will allow the hopper to be clear for the next house pickup.

Each time the packer completes a full cycle, the proximity switch located on the right-hand side, behind the packer, sends a signal to the electronic controller. The controller then counts the amount of cycles that the packer does, and will stop the packer after the preset amount of cycles has been reached.

I/O Status

In this section, you will find helpful information to troubleshoot body-related problems that you may face during your day-to-day tasks. These problems can be of any nature, from hydraulic to mechanical, electrical or pneumatic.

Select the control module corresponding to the part of the truck that needs to be checked.

For example, if you want to check all functions that are found in the cab, choose module #10. For all functions that pertain to the chassis, choose module #20, etc.

To choose a particular module, use the up/down arrows to select it and press "OK".

NOTE: Pressing "OK" can be done two ways: either press the far right button or the "OK" button.

Press "Esc" to return to the preceding page.

Figure 3-8 Module I/O Status page



Input Status

The Input Status page is accessible from the Module I/O Status page. After selecting the desired module and pressing "OK", the Input Status page of the selected module is displayed (see Figure 3-9).

Figure 3-9 Input Status page



The Input Status page contains a set of rectangles. Each of these rectangles represents input elements, which in turn correspond to a particular function of the truck. For example, if you select rectangle I00, a short description appears in the lower part of the screen, which indicates that this rectangle relates to the input element coming from the service brake pressure switch.

NOTE: Each rectangle is numbered and relates to a specified function of the truck. However, for a given number, the related function may vary from truck to truck.

Table 3 Colored rectangles

Rectangles (inputs)	Function Status
Blue	Inactive
Green	Active

Press "Esc" to return to the preceding page.

Press the "Output" button to display the Output Status page.

Output Status

The Output Status page is accessible from the Input Status page (see Figure 3-10).

Figure 3-10 Output Status page



The rectangles found in this page are used to check the status of different outputs.

NOTE: Each rectangle is numbered and relates to a specified function of the truck. However, for a given number, the related function may vary from truck to truck.

Table 4 Colored rectangles

Rectangles (outputs)	Function Status
Blue	Inactive
Green	Active
Red	Closed short-circuit
Yellow	Open circuit

Press “Esc” to return to the preceding page.

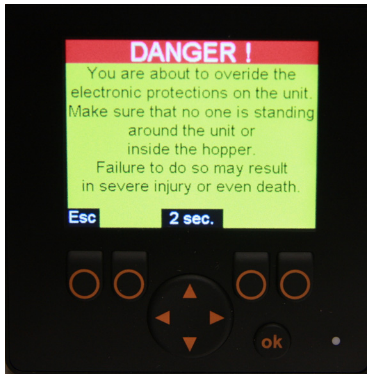
Press the “Force” button to display the Force page.

Force

The Force page is accessible from the Output Status page. Just press the corresponding button to access the Force page.

But before the Force page is displayed, a warning message appears on the screen (see Figure 3-11).

Figure 3-11 Warning message



This message stays there for 15 seconds. Then an "OK" prompt appears on the lower right-end corner of the screen.

Figure 3-12 Warning message w/ "OK" prompt



Press "OK" to go to the Force page or "Esc" to return to the preceding page.

After pressing "OK", the Force page appears on the screen.

Figure 3-13 Force page (input)



As no input function can be forced to be active or inactive, the operator must press the "Output" button to go to the following page (see Figure 3-14).

Figure 3-14 Force page (output)



The Force page allows the operator to force a function to be overriden, that is, to make an inactive funtion active and an active function inactive.

This page contains a set of rectangles. Each of these rectangles is numbered and corresponds to a specific function of the truck.

Colors are used to indicate whether the corresponding function is active or not:

- a blue rectangle means the corresponding function is inactive
- a green rectangle means the corresponding function is active

Also:

- a red rectangle means there is a closed short-circuit
- a yellow rectangle means there is an open circuit

A white-bordered rectangle means that this rectangle is selected. Use the directional arrows to select a specific rectangle or function. When a rectangle is selected, a short description of the corresponding function appears in the lower part of the screen.

After selecting a rectangle:

- press “ON” to activate the corresponding function (rectangle turns blue to green)
- press “OFF” to deactivate the corresponding function (rectangle turns green to blue)
- press “RESET” to have the software control the status of the corresponding function

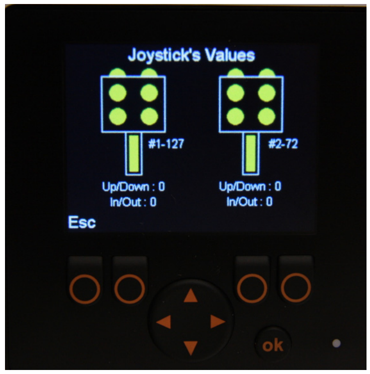
NOTE: To go from a module to another (e.g. from module 10 to 20), the operator has to go back to the Module I/O Status page (see Figure 3-8) and select module 20.

Press “Esc” to return to the preceding page.

Joystick

The joystick page is accessible from the Module I/O Status page (see Figure 3-8). From that page select “Joystick” using up/down arrows and press “OK”. The Joystick page opens (see Figure 3-15).

Figure 3-15 Joystick page



The Joystick page allows the operator to check if all functions of the joystick are working correctly. If one joystick is installed on your vehicle, it will be represented on the display monitor by joystick 127. However, if two joysticks are installed on your vehicle, any of the two joystick numbers (127 and 72) can represent either joystick on the screen.

If you press a joystick button, the corresponding button on the display monitor will turn to green. If nothing happens, there might be a communication problem between the joystick and the master control module. Refer to maintenance personnel or Labrie*Plus*.

Also, if you move the joystick backwards, forwards or sideways, you should see the values under the illustration changing. If no change occurs when moving the joystick, a communication problem between the joystick and the master control module may be the cause. Refer to maintenance personnel or Labrie*Plus*.

Press “Esc” to return to the preceding page.

J1939

The J1939 page is useful when you need some specific information (e.g. current gear, road speed, brake).

Figure 3-16 J1939 page



Your vehicle is equipped with 2 different CAN-based communication buses:

- the **J1939 bus**, which is used for the chassis equipment; and
- the **CANopen bus**, which is used for the body.

These 2 communication buses are completely independent of one another, except for some specific data that are transferred from the chassis J1939 bus to Labrie's multiplexed system in order to be used by this system. These specific data are the following:

- selected gear
- current gear
- road speed
- engine RPM
- brake
- parking brake

Press "Esc" to return to the preceding page.

Module Software Version

In this section, you will find the software version currently used by each of the modules installed on the truck and by the master control module.

Figure 3-17 Program Version page



Press "Esc" to return to the preceding page.

Optional Item

This section contains an optional hour meter that tracks pump usage for maintenance purposes.

Press "Esc" to return to the preceding page.

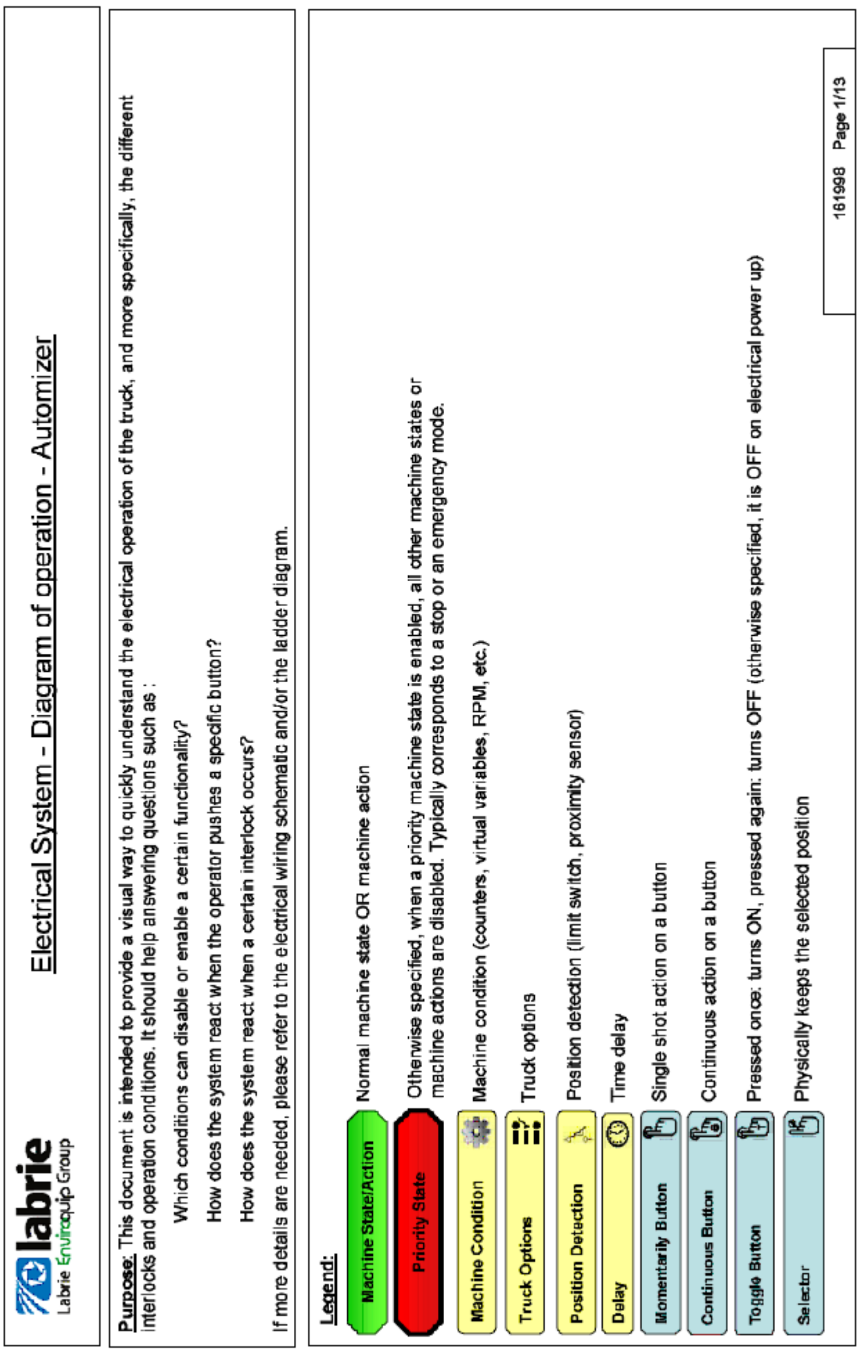
Time Adjust

This section allows you to set the Time and Date indicator.

Press "Esc" to return to the preceding page.

Operational diagram of the Multiplexed System

Labrie Enviroquip Group has elaborated a document that illustratres the way the multiplexed system works. Particularly, it visually shows how this system reacts to different situations and how it manages the various lockouts that are on the AUTOMIZER RIGHT-HAND™. It also makes reading and understanding related ladder logic diagrams much easier. The following are the first two pages of this document. If you are interested in receiving the entire document, call Labrie*Plus* (see *To Contact Labrie Plus* on page 2).



labrie
Labrie Enviroquip Group

Electrical System - Diagram of operation - Automizer

Purpose: This document is intended to provide a visual way to quickly understand the electrical operation of the truck, and more specifically, the different interlocks and operation conditions. It should help answering questions such as :

Which conditions can disable or enable a certain functionality?

How does the system react when the operator pushes a specific button?

How does the system react when a certain interlock occurs?

If more details are needed, please refer to the electrical wiring schematic and/or the ladder diagram.

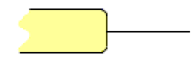
Legend:

Machine State/Action	Normal machine state OR machine action
Priority State	Otherwise specified, when a priority machine state is enabled, all other machine states or machine actions are disabled. Typically corresponds to a stop or an emergency mode.
Machine Condition	Machine condition (counters, virtual variables, RPM, etc.)
Truck Options	Truck options
Position Detection	Position detection (limit switch, proximity sensor)
Delay	Time delay
Momentarily Button	Single shot action on a button
Continuous Button	Continuous action on a button
Toggle Button	Pressed once: turns ON, pressed again: turns OFF (otherwise specified, it is OFF on electrical power up)
Selector	Physically keeps the selected position

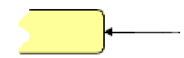
161998 Page 1/13

Few tips to read the schematics:

- A line with a straight end connection should be seen as a line that comes out (i.e. from the box to somewhere else).

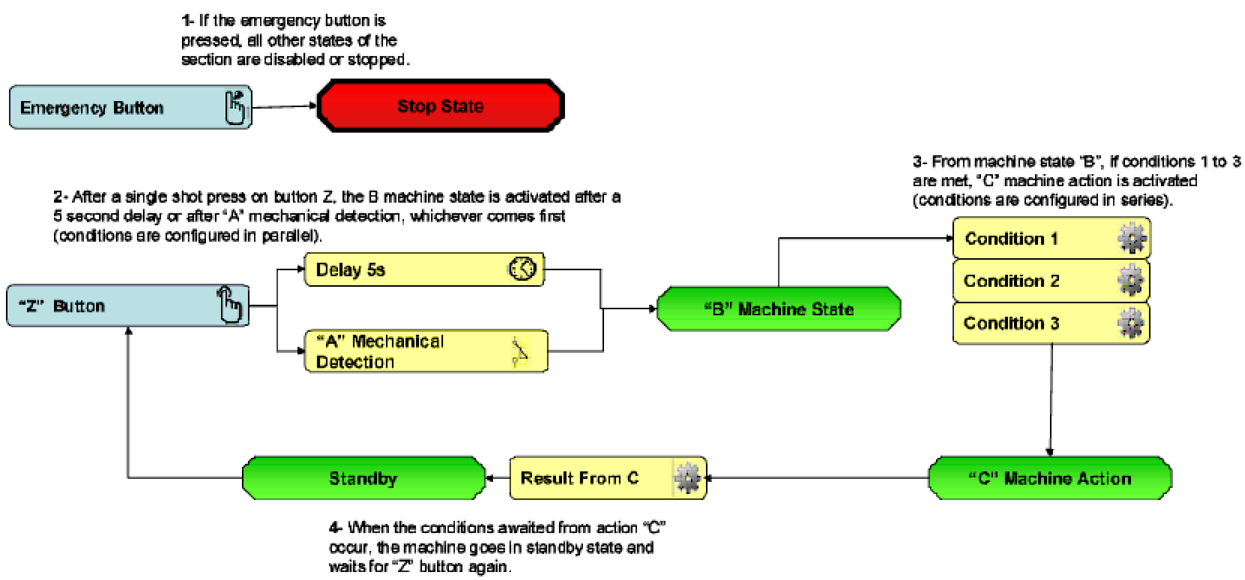


- A line with an arrow connection should be seen as a line that comes in (i.e. to the box from somewhere else).



- It is generally easier to understand the schematics when starting with a box that only has lines coming out or lines coming in.

Example:



Rocker Console

The rocker console is located in the middle of the cab for easy access during collection and operation. Here is a description of the controls and switches found on the rocker console.

Figure 3-18 Rocker console (part 1)

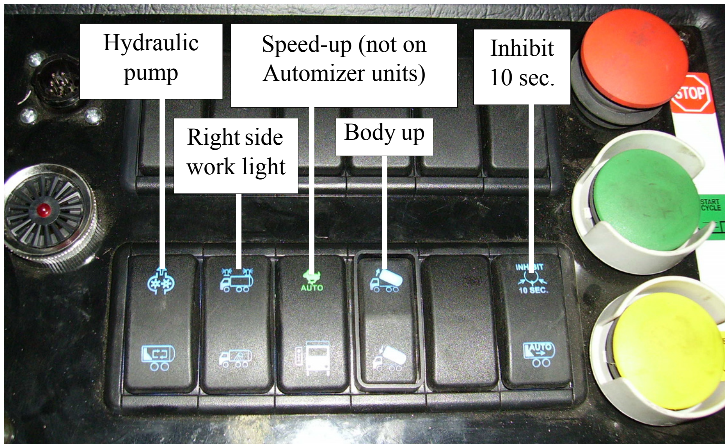
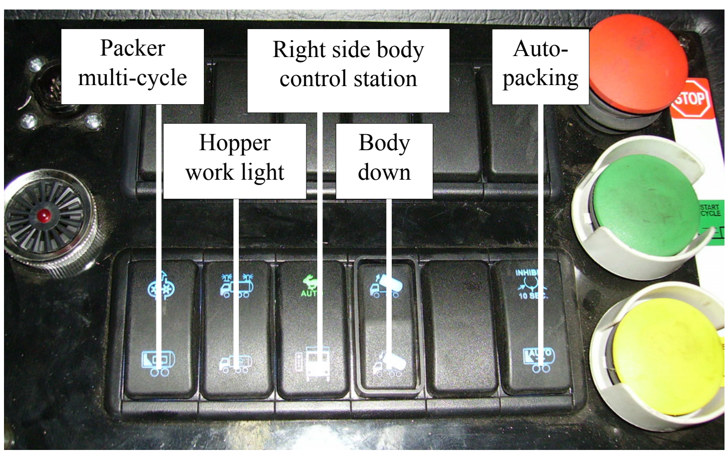


Figure 3-19 Rocker console (part 2)



NOTE: The switches and controls found on the console vary according to the options installed on the vehicle.

Pump Switch

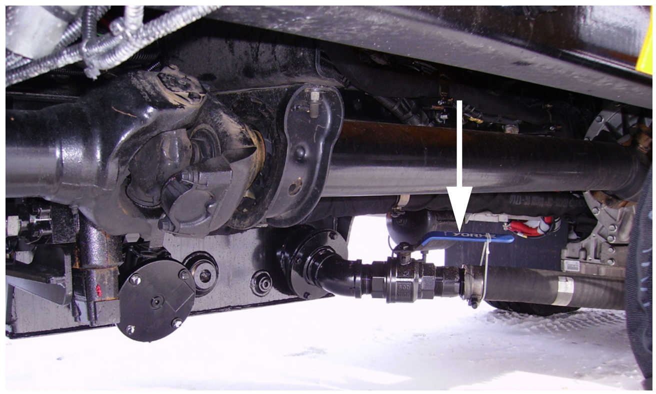
This switch (see Figure 3-18), also known as PTO switch, engages and disengages the hydraulic pump, all the body functions (packer, body hoist, tailgate) and the joystick that controls the arm. Note that the switch turns to green when the pump is engaged.

- Press the switch to activate the hydraulic pump.

- Press the same switch again to deactivate the hydraulic pump.

NOTE: Do not close the main shut-off valve on the hydraulic tank even if the PTO switch is turned off. The pump is always turning whatever the engine RPM. It is very important not to let the pump run dry or without oil. Otherwise, the pump will be seriously damaged or even destroyed.

Figure 3-20 Main shut-off valve



IMPORTANT: In case of a leak in the hydraulic system, and if the vehicle has to be driven somewhere else, take off the drive shaft between the pump and the engine. Call maintenance facility and refer to the Maintenance Manual.

Body Up Switch

This control switch (see Figure 3-18) is used to raise the body. Press and keep down this switch to raise the body to the desired height.

Before using this switch, make sure that the truck is parked on a safe level ground.

When the body is raised a buzzer sounds.

Danger!

Always use body safety prop when performing maintenance under a raised body. Failure to do so may result in severe injury or even death.

Body Down Switch

This control switch (see Figure 3-19) is used to lower the body. Press and keep down this switch to lower the body to the desired height. When the body touches the rod of the limit switch, the buzzer stops sounding.

Tailgate Up Switch

This control switch is used to raise the tailgate. Press and keep down this switch to raise the tailgate to the desired height.

Before using this switch, make sure that the truck is parked on a safe level ground.

IMPORTANT: Remove tailgate-locking pins before using this control switch.

Warning! Do not drive the vehicle when the tailgate is not fully closed.

When the tailgate is unlocked, the TAILGATE UNLOCKED or BODY RAISED warning lamp turns on and a buzzer sounds.

Tailgate Down Switch

This control switch is used to lower the tailgate. Press and keep down this switch to completely close the tailgate or to lower it until it rests on the tailgate safety prop.

IMPORTANT: When the tailgate is completely closed, put the tailgate-locking pins back to their place.

Packer Multi-Cycle Switch

This switch (see Figure 3-19) allows the packer to run a preset number of cycles (from 2 to 8, 3 being the default setting) by pressing the green button once (see Figure 3-23). Cycles can be stopped anytime by pressing the red button or by turning off the multi-cycle control switch. When turning off the multi-cycle control switch, the packer completes the ongoing cycle in order to get back to the fully retracted position, and then stops.

Right-Hand Side Work Light Switch

This switch (see Figure 3-18) activates and deactivates the right-hand side work light.

- Press the switch once to turn on the right-hand side work light (the switch turns to green).
- Press the switch again to turn off the right-hand side work light (the switch turns to blue).

Hopper Work Light Switch

This switch (see Figure 3-19) activates and deactivates the hopper work light.

- Press the switch once to turn on the hopper work light (the switch turns to green).
- Press the switch again to turn off the hopper work light (the switch turns to blue).

Crusher Panel Down Switch (optional)

Press and keep down this switch to lower the crusher panel to the desired position.

The crusher panel is an option that may be installed on an AUTOMIZER RIGHT-HAND™ vehicle. If your unit is equipped with this option, we suggest you to use it only for bulky items. In many cases, unnecessary use will slow down the operation. Bulky items can be maintained in place with the crusher panel while the packer crushes them.

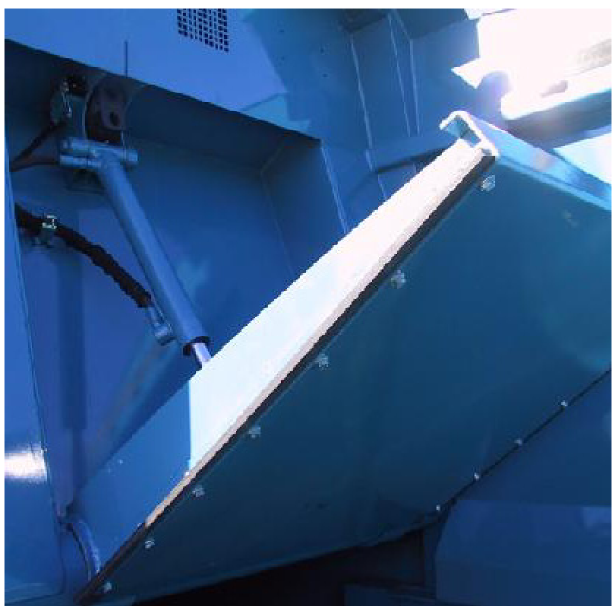
The crusher panel can be lowered upon the refuse to prevent it from popping up in front of the packing ram, thus increasing the compaction effect during the load breaking sequence.

To help during the unloading process, a good amount of garbage should be left in front of the packer and under the lowered crusher panel as you finish your collection route. Once the body is raised at landfill, you can activate the packing ram to help clear whatever could be jammed in the hopper. This procedure can also be done without the crusher panel.

Crusher Panel Up Switch (optional)

Press and keep down this switch to raise the crusher panel to the desired position.

Figure 3-21 Crusher panel



Right-Hand Side Body Control Station Switch (optional)

In order to use the optional right-hand side body control station, the operator must press this switch (see Figure 3-19).

- A green switch means this feature is active.
- A blue switch means this feature is not active.

10-Second Inhibit Switch

This switch (see Figure 3-18), also known as grabber auto-close override, allows the operator to open the grabber in the hopper in order to throw away the grabbed object directly in it. It also allows the operator to pick up elevated carts.

To enable this feature, press the inhibit switch. This switch will then turn from blue to green.

When pressing this switch, the grabber opens for 10 seconds, then closes automatically.

Caution!

The inhibit feature overrides all safety features. The operator must be aware of all applicable safety instructions and all potential consequences related to its misuse. Major equipment damage and/or injury may occur.

Auto-Packing Switch

The auto-packing switch (see Figure 3-19) enables the packer to automatically start cycling about 4 seconds after the grabber is closed. This gives the arm enough time to reach the hopper and dunp the cart before the packer starts to pack.

When the auto-packing feature is used simultaneously with the multi-cycle feature (refer to "Packer Multi-Cycle Switch" on page 60), the packer will complete the preset number of cycles until the operator closes the grabber. Once the grabber is closed, the multi-cycle feature is reset.

If the grabber is being closed in the middle of a cycle, the packer interrupts the current cycle, returns to its fully retracted position, and then retarts the next cycle. When a cycle is interrupted and the packer has returned to the home position, there is no delay before the packer retarts the next cycle. The four-second reset applies only when the packer has completed all its cycles.

Interrupting a cycle prevents dumping carts directly over the packer. Piled material over the packer could damage the follower panel.

In-Cab Packer Control Station

The AUTOMIZER RIGHT-HAND™ has a packer control station located on the cab console. Here is a description of the three buttons found on the packer control station.

Stop Push-Button (red)

The Emergency Stop button (see Figure 3-22) will stop all hydraulic functions on the truck (body, tailgate, packer, etc.). By pressing the red button, the packer will stop where it is. The red button has to be manually pulled back to reactivate the hydraulic system.

Figure 3-22 Stop push-button



Pack Push-Button (green)

The packer start cycle button activates the packer for one complete cycle. A complete cycle takes about 20 seconds.

Figure 3-23 Pack push-button



Retract Push-Button (yellow)

The packer retract button (see Figure 3-24) will retract the packer at the beginning of its stroke. This control is useful when the body is full and the material prevents the packer from reaching the end of its stroke. Manual retraction of the packer is necessary to bring back the packer.

Figure 3-24 Retract push-button



Joystick Controls

Arm Joystick

The joystick is used to control the Right-Hand™ arm of the Automizer™. It can be located either on the console at the center of the cab or near the right-hand side door. In some units, two joysticks are installed in the cab: one on the console, the other near the right-hand side door.

The controls on the joystick are the handle, the buttons on the top and front, and the deadman switch (see Figure 3-25).

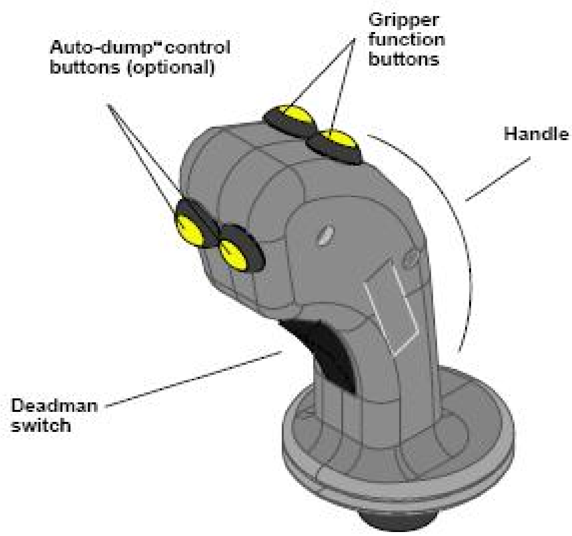
- The handle is used to control the horizontal and vertical movements of the arm's two main components.
- The top buttons are used to control the opening and closing movement of the gripper: the right button is used to open the gripper; the left button to close the gripper.
- The buttons on the front are used to control the Auto-Dump™ feature (optional). They can also be used to operate the Comb Air Lock, which is part of an optional arm configuration. This option is called Heavy Duty Arm-Comb & Grabber and is designed to hold domestic 64-95 gallon carts or European rectangular 660-1100 L carts).

NOTE: The Auto-Dump™ feature and the Heavy Duty Arm-Comb & Grabber are options. Therefore, the joystick front buttons are functional only on vehicles equipped with one of these options.

The deadman switch is used as a safety device to ensure that every movement of the arm is absolutely wanted and controlled by the operator. That is, if the operator is not pressing the deadman switch while trying to move the arm with the joystick, no movement will occur. With such a safety feature, an accidental movement of the joystick will not be transmitted to the arm.

Joysticks operate at 45° and 90° angles. As a result, you can perform two functions at the same time; for example, you can move the arm and the grabber simultaneously.

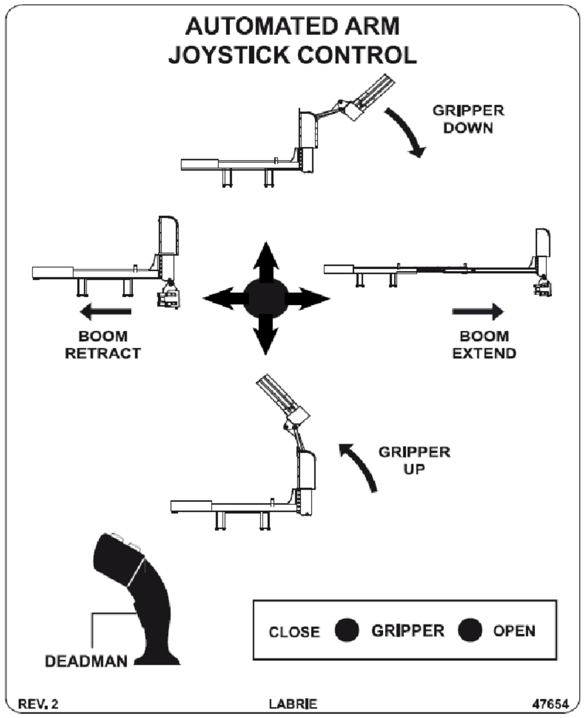
Figure 3-25 Automated arm joystick



IMPORTANT: Deadman switch must be depressed to activate in/out and up/down commands.

- Shift the joystick forward at 90° toward the grabber down lettering (see Figure 3-26) to lower the grabber.
- Shift the joystick forward at 45° between the grabber down and arm extend lettering to lower the grabber and extend the arm.
- Shift the joystick toward the streetside at 90° to the arm retract lettering to retract the arm only.
- Shift the joystick backward at 45° between the grabber up and arm retract lettering to raise the grabber and retract the arm at the same time.
- Shift the joystick backward at 90° to the grabber up lettering to raise the grabber only
- Shift the joystick toward the curbside at 90° to the arm extend lettering to extend the arm only.

Figure 3-26 Automated arm joystick control decal



Cab Dashboard

The following is a description of the controls and buttons found on the dashboard.

Parking Brake

The parking brake must be used every time the AUTOMIZER RIGHT-HAND™ is stopped on idle position other than the regular traffic stops (see Figure 3-27).

Figure 3-27 Parking brake



Arm Extended Warning Lights

There are two arm extended warning lights on the dashboard. When they are flashing, they indicate that the arm is not completely retracted alongside the hopper. Do not move the vehicle in such a situation. Completely retract the arm until these lights stop flashing before moving the vehicle.

Figure 3-28 Arm extended warning lights



Warning! Never drive this vehicle if the automated arm is not parked alongside the truck. This unit would be too high and/or too wide to be driven. Failure to retract the arm could result in unit and/or property damage, personal injury or even death. Arm extended warning lights flash when the arm is extending.

4

Operating the AUTOMIZER RIGHT-HAND™

The different methods, procedures and necessary actions to operate the AUTOMIZER RIGHT-HAND™ are presented in this section.

Warning! Always read and understand the Operator Manual before operating the equipment.

Before operating the AUTOMIZER RIGHT-HAND™, the operator must be completely familiar with all safety procedures, and the location, operation and functions of all controls and indicators related to the operation of the unit.

You must complete the daily inspection before starting the vehicle. It is your responsibility to report any malfunctions or concerns to your supervisor and maintenance personnel.

Consult with your supervisor for specific rules of driving the AUTOMIZER RIGHT-HAND™.

Obey all speed restrictions and regulations.

Daily Inspection

Approaching the Vehicle

As you approach the vehicle, look for any object under or against the vehicle and check the surroundings for people, other vehicles, as well as ground and overhead obstructions. Ensure that the truck is parked at the most convenient place where you will have all the clearance required to perform a complete start-of-the-day inspection. During the daily inspection, look for any structural damage. Inspect tires and check the hydraulic tank for air leaks.

Visual Inspection

Before starting the vehicle, the operator MUST perform a visual inspection of the truck. Ensure the engine is not running and the parking brake is set.

- Ensure the cleanliness of lamps, safety labels, camera lenses, mirrors, windows, and the vehicle in general.
- Ensure that safety equipment is present (i.e. fire extinguisher, first aid kit).
- Ensure there is no structural damage.
- Ensure that there is no unusual wear, distortion, cracking, leaning, leaking on the vehicle.
- Ensure that hydraulic oil level (sight gauge on tank) is as recommended (cylinders must be collapsed).
- Ensure that the hydraulic cylinders do not leak, and ensure mounting pins are secure.
- Ensure the hydraulic tank shut-off valve is fully open.
- Ensure there is no mechanical problem: structure, rollers, hinges, door locks, wear items, etc. Report any defective system to maintenance personnel.
- Ensure there are no leaks, cracks or other types of problems on the frame area, fuel tank, hydraulic tank, air tanks (air tanks must be drained every day), cleaning trap and wheels.
- Ensure the tailgate is fully closed, BOTH tailgate safety pins are in place and rollers are on main locking pins.
- Once the visual inspection is over, you must start the engine to check if the systems are working properly.

Starting the Vehicle

To start the AUTOMIZER RIGHT-HAND™ :

1. Before starting the engine, check the following items:
   - **1 a.** Transmission shifter is on neutral.
   - **1 b.** Parking brake is on (see *Parking Brake* on page 66).
   - **1 c.** Hydraulic system is off (see *Pump Switch* on page 58).
2. Start the vehicle as stated in the chassis manufacturer's manual.
3. Switch **ON** the pump to engage the hydraulic system (the air pressure has to be at a minimum of 70 psi). See *Rocker console (part 1)* on page 58.
4. Turn on all light switches.
5. If required, move the truck to an appropriate area to perform the daily inspection.
6. Report any defective system to the maintenance personnel.

Body Inspection Procedure

Exit the cab to continue your inspection. Bring a rag along to clean all accessible lights, labels, camera lenses, etc. Check for mechanical problems: rollers, hinges, door locking mechanisms, wear items, etc. Report any defective system to the maintenance personnel.

Body inspection procedure:

1. Activate the packer for a full cycle.
2. Check the automated arm operation.
3. Check if the tailgate safety pins are in place. Put them in place to lock the tailgate properly.
4. As you walk along the side of the truck, clean all safety labels.
5. Check the frame area, fuel tank and air tanks (air tanks must be drained every day), cleaning traps and wheels for leaks, cracks or other type of problems.
6. At the front end, check lights and mirrors.
7. Go around and check lights, clean camera lenses, labels , lights, etc.
8. Check for hydraulic leaks.

Arm Inspection Procedure

On a daily basis, perform a visual inspection of the automated arm, looking for leaks, cracks or premature wear of the moving parts. Refer to the Lubrication section in the Maintenance Manual for detailed greasing points.

Figure 4-1 Automated arm



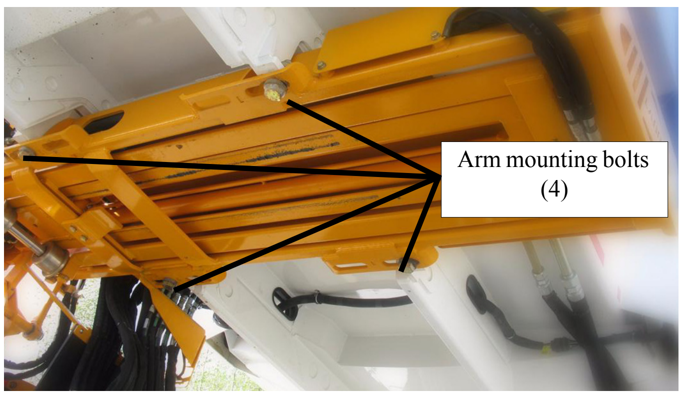
Danger! Do not stand directly in the path of the arm while performing the inspection.

Warning! Apply the lockout/tagout procedure at all times. See *Locking Out and Tagging Out the Vehicle* on page 32

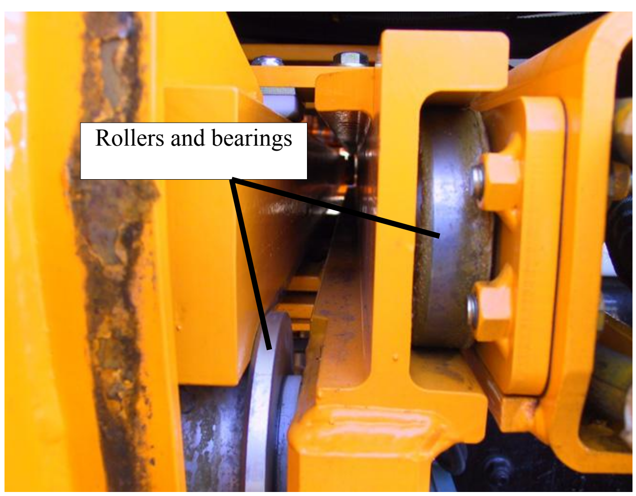
Apply the following inspection procedure:

1. Make sure to park the vehicle on a safe level ground.
2. Ensure that the parking brake is applied and the vehicle is tagged out for maintenance purposes (see *Locking Out and Tagging Out the Vehicle* on page 32).
3. Start the engine and engage the hydraulic pump (see *Pump Switch* on page 58).
4. Fully extend the arm.
5. Turn off the hydraulic pump and the engine.
6. Perform a visual inspection of the following items:

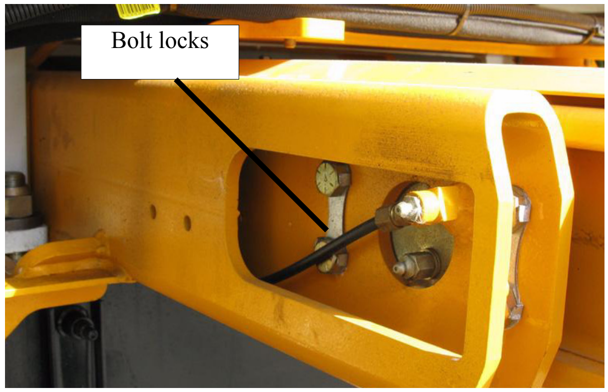
- pivots;
- grabber;
- cylinders;
- mounting bolts;



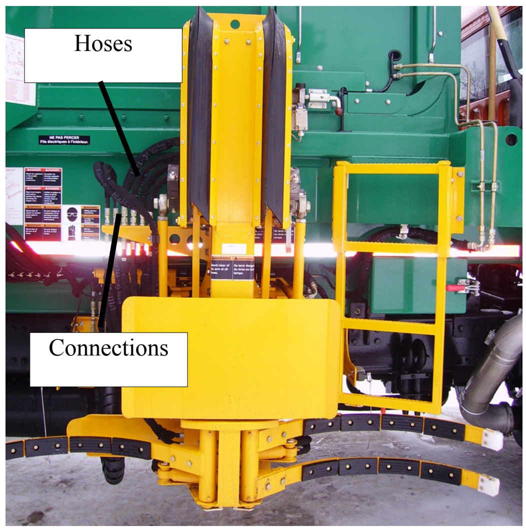
- rollers and bearings



- Bolt locks;



- Hoses and connections.



7. Check for loose nuts and bolts.
8. Check limit switches. Refer to *Maintenance Manual*.

Inspection Sheet

The following is an example of an inspection sheet. The operator MUST follow the inspection sheet provided by his employer. If the employer does not have any, ask for his permission before using this example sheet.

VEHICLE CONDITION REPORT

Date: ________________ Unit: ______________________________
Driver: ____________________ Demo: ______________________
Engine Hrs in: _______________ Engine Hrs out: _________________
Mileage in: _________________ Mileage out: ___________________
Start Time: _____________________________ Finish Time: _____________________________

FLUID LEVELS

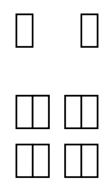
PRE	POST		Amount Added	PRE	POST		Amount Added
☐	☐	Engine Oil	Qt. _______	☐	☐	Fuel	Gal. ________
☐	☐	Hydraulic Oil	Qt. _______	☐	☐	Transmission	Qt. _________
☐	☐	Coolant	Qt. _______	☐	☐	Water	Qt. _________

CAB INSPECTIONS

If items need repair, check below and describe.

PRE	POST		PRE	POST	
☐	☐	All gages/gage lights	☐	☐	Cab horn
☐	☐	Low oil pressure	☐	☐	Exterior back-up horn
☐	☐	Low oil warning light/buzzer	☐	☐	Windshield cracks
☐	☐	Seat and seat belt	☐	☐	Windshield wipers
☐	☐	Clutch free play (Juggler)	☐	☐	Heat/Defrost
☐	☐	License/registration papers	☐	☐	Reflective triangles
☐	☐	Service brakes adjusted	☐	☐	Steering play
☐	☐	Parking brakes operational	☐	☐	Radio
☐	☐	Low air warning light/buzzer	☐	☐	Camera
☐	☐	Air compressor adequate			

TIRES
Indicate any defects.



VISUAL BODY WALK-AROUND

PRE	POST		PRE	POST		PRE	POST	
☐	☐	Battery disconnect	☐	☐	Electrical wiring	☐	☐	Compactor working
☐	☐	Body damage	☐	☐	Fire Extinguisher	☐	☐	Hydraulic leaks
☐	☐	Cab damage	☐	☐	Fuel tank/lines	☐	☐	Hydraulic pressure
☐	☐	Air lines	☐	☐	Exhaust	☐	☐	Hydraulic hoses
☐	☐	Air compressor	☐	☐	Engine	☐	☐	Wheel/Rims
☐	☐	Air dryer	☐	☐	Starter	☐	☐	Seals
☐	☐	Head lights	☐	☐	Turn signal	☐	☐	Transmission
☐	☐	Marker lights	☐	☐	Camera	☐	☐	Mirrors
☐	☐	Brake lights	☐	☐	Cable/Hooks	☐	☐	Radiator
☐	☐	Suspension	☐	☐	Arm	☐	☐	Safety devices
☐	☐	Hopper clean	☐	☐	Body clean	☐	☐	Safety decals
☐	☐	Tailgate	☐	☐	Packer	☐	☐	Cart tipper
☐	☐	Safety Interlock switches						

PRE	POST	
☐	☐	No Defects – Vehicle Condition Satisfactory

DEFECT DESCRIPTION

____
____
____
____

☐ Above defects corrected
☐ Above defects need not be corrected for the safe operation of vehicule.

Mechanic's Comments :

_______________________ _________
DRIVER'S SIGNATURE **DATE**

_______________________ _________
DISTRIBUTOR SIGNATURE **DATE**

_______________________ _________
DRIVER'S REVIEW SIGNATURE **DATE**

Loading and Packing

Planning your Route

It is important to plan your route in order to be efficient. Planning your route will shorten your collection time and prevent from being caught in a traffic jam. Remember that the AUTOMIZER RIGHT-HAND™ was designed exclusively to pick up roller carts.

Safety while Using the Packing System

Warning! Always keep the warning lights and/or four-way flashers on when collecting refuse.

Danger! Never attempt to reach inside the hopper area when either the packer blade or the arm is in motion. Severe injury or death may occur.

Warning! Wear protective safety equipment (e.g. safety glasses and gloves) when you are working close to the hopper area.

Warning! Always apply the lockout/tagout procedure before entering the hopper area. See *Locking Out and Tagging Out the Vehicle* on page 32

Loading Refuse

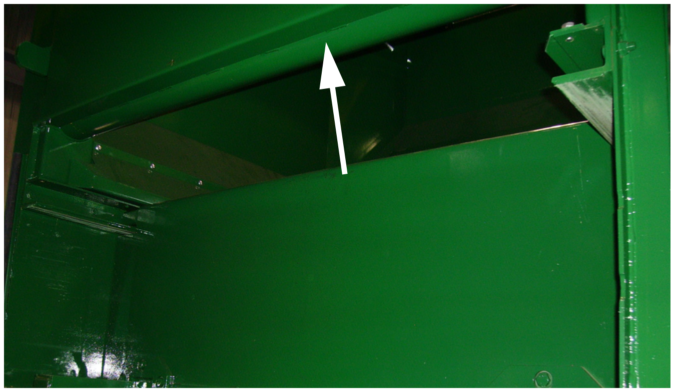
Using the arm to load the hopper, fill up the garbage as high as the packer and then press the green button to get a complete cycle. Be careful of explosive projectile objects and watch for overspills. See "Pack on the Go" on page 78.

While collecting roller carts, you should start the packer cycle every time you have finished emptying one cart in the hopper. See *Loading Procedure* on page 76

Packer Description

The packer, made of high strength steel, travels the hopper to push refuse into the body. If any piece of garbage exceeds above the packer, it will be crushed or bent against the rear breaker bar, located just above the exit opening of the hopper.

Figure 4-2 Breaker bar



Whatever debris that is not pushed inside the body on a given stroke of the packer will fall back in the hopper when the packer retracts. As another cycle is activated by the operator, what was left in the hopper in the previous stroke of the packer will be pushed into the body.

If the packer does not cycle:

1. Ensure the hydraulic system is engaged.
2. Check the emergency red button.
3. Press the yellow button to ensure the packer is completely retracted.
4. Check around the packer for any obstruction preventing it from moving freely.
5. Check fuses and breakers in the console.
6. Report your findings to the maintenance personnel.

Loading Procedure

To load refuse into the hopper:

1. Stop the vehicle so that the arm is lined up with the roller cart.
2. With the arm parked alongside the truck, use the joystick to reach the cart (extension of the arm may be needed to reach the cart). The operator *must* push on the deadman switch in order to enable joystick functions (see Figure 4-3).

Figure 4-3 Joystick



Warning!

Never by-pass the deadman switch with tape, tie-wrap, or anything else in order to operate the arm.

3. Close the grabber by pressing the corresponding push-button shown in Figure 4-3.
4. If the arm is not alongside the truck, retract it.
5. Pull the joystick to raise the grabber into the hopper.

   The garbage should then fall down.
6. Lower the grabber.

   Ensure that the cart is empty before lowering the grabber.
7. Put the cart where it previsously was.
8. After putting back the cart, retract the arm (if needed) and open the grabber.

Warning!

Do not open the grabber while lifting up the roller cart because the cart will fall down. This may result in equipment damage and/or injury.

Warning! Do not move the vehicle if the arm is not fully retracted alongside the hopper.

Pack on the Go

It may be useful to expedite the collection process and be more efficient. The AUTOMIZER RIGHT-HAND™ gives you the possibility to pack on the go or allow the packer to cycle while you drive.

As you are finished loading the hopper, you can activate the multi-cycle switch and press the start cycle button (green button). This will allow the packer to cycle, even if you are moving the vehicle to the next pickup. When moving the vehicle, the hydraulic pump will turn at engine RPM, which depends on truck speed.

The multi-cycle function allows the packer to perform up to eight (8) cycles when pressing the start cycle button (green button). Standard factory preset of the module is three (3) cycles.

Unloading

Unloading Procedure

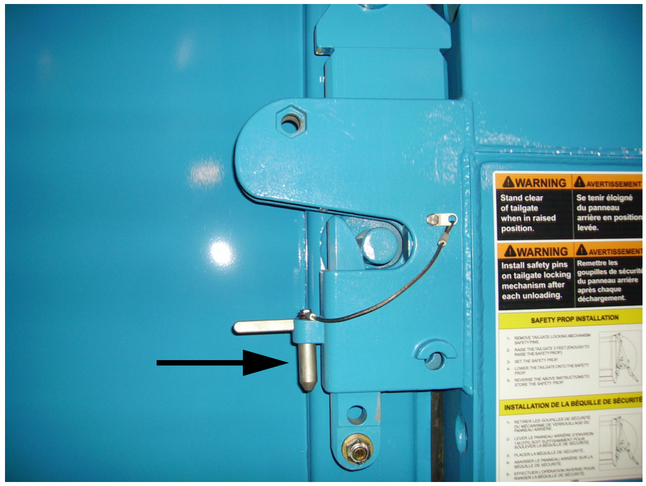
Once you have completed your collection route, make sure the automated arm is fully retracted alongside the truck and the crusher panel is lowered. Keep some garbage not packed in front of the packer in order to facilitate the unloading process.

Warning! Ensure the overhead is clear before raising the body.

The following is the standard unloading procedure:

1. Drive the vehicle to the landfill.
2. Ensure the vehicle is on safe, stable and level ground.
3. Check the overhead clearance before raising the body and opening the tailgate. Make sure the air suspension is dropped or the tag axle is down (if equipped).
4. Remove tailgate safety pins.

Figure 4-4 Safety pin



5. Fully open the tailgate.
6. Raise the body. The garbage should slide out.
7. Slowly move the vehicle forward to prevent the garbage from piling up under the tailgate. This is the only time you can move the truck with the body raised. Do it very cautiously and cover the shortest distance possible. Always be aware of the overhead clearance.
8. Cycle the packer to help eject the garbage. It may be helpful to have some garbage left in the hopper to enhance the effect of the packer cycle on the garbage.
9. Lower the body and close the tailgate.
10. Put safety pins back in place.
11. Drive away from the unloading site.
12. Perform end-of-the-day inspection (see *End-of-the-Day Cleaning and Inspection* on page 82). .

Warning!

Never move the truck backwards with the body in raised position.

Never raise the body if the tailgate is not fully open.

Danger!

Always use the tailgate safety prop while working under a raised tailgate. The safety prop should be used even if the tailgate is in fully raised position.

Unloading Corrective Actions

As you are unloading the body, some garbage may fall or be blown away between the chassis and the body.

Apply the following procedure for the remaining garbage stuck on or between the chassis and the body:

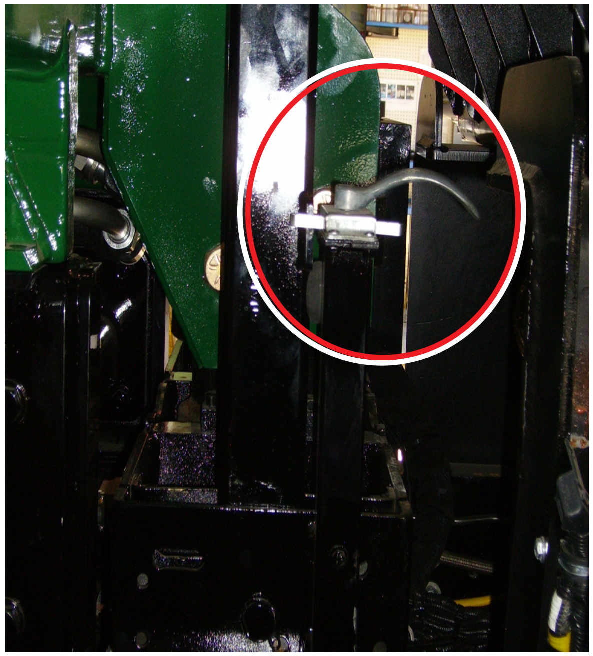
1. Lift the body until the safety prop is clear to tilt under the body (see Figure 4-5).
2. Release the safety prop by pulling the handle (see Figure 4-6).
3. Pull down the safety prop towards the body.

Figure 4-5 Body safety prop



4. Slowly lower the body so it rests on the prop.
5. Proceed with the necessary cleaning of the chassis.
6. Once finished, slightly raise the body and put the safety prop back to its vertical position.
7. Lock the safety prop.
8. Lower the body onto the chassis before moving the vehicle.

Figure 4-6 Safety prop release handle



Unloading Emergency Actions

If the truck starts to sink on one side as you unload:

Danger!



UNLOADING EMERGENCY ACTIONS

1. Stop all movement of the equipment.
2. Start or continue lowering the body.
3. If the equipment does not stop sinking, stay inside and protect yourself.

Danger!



Do not use safety prop with a loaded body. Never stand under a raised loaded body.

If the body does not raise:

1. Ensure the hydraulic system is engaged.
2. Make sure the air pressure is above 70 psi.
3. Check all fuses in the console.
4. Contact the maintenance facility if there is no change.
5. Air suspension needs to be dropped (if equipped).
6. Tag axle must be lowered (if quipped).

Emergency Actions

Hydraulic Oil Spill

In case of hydraulic spill, do the following:

1. Press the emergency red button.
2. Turn off the pump switch and then the truck engine.
3. Close the main valve on the hydraulic tank.
4. Carefully inspect and find the cause of the leak.
5. Call the maintenance facility and report your findings.
6. If the leak cannot be repaired on site, and the vehicle cannot be towed, remove the pump drive shaft before restarting the engine.
7. When it is time to restart the pump after repair, ensure that the valve on the hydraulic tank is fully open and that there is sufficient oil in the hydraulic tank.

Someone is Trapped in Packer System

In such a case, do the following:

1. Hit the emergency stop button (red button).
2. Call for help and then proceed with first aid.

End-of-the-Day Cleaning and Inspection

Daily Hopper Cleaning

Cleanliness is a key part of safety and critical to the vehicle maintenance.

Daily cleaning of the hopper and chassis is crucial because it will minimize breakdowns and maintenance expenses. Daily wiping down of all truck lights, warning lights and safety labels will make your vehicle more visible so that surrounding pedestrians and vehicles will be safer around it.

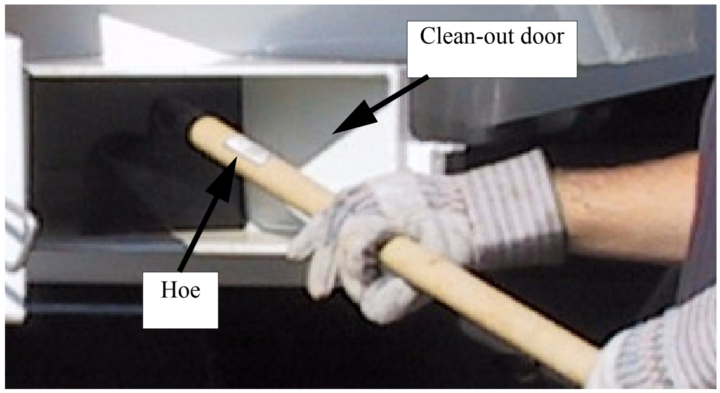
The procedures described in this section are necessary for the vehicle to be well maintained and for the operator to be safe while cleaning the vehicle.

Hopper cleaning procedure:

1. Park the vehicle on level ground and apply the parking brake.
2. Fully extend the arm and the packer.
3. Lower the crusher panel (if installed) and clean all accumulated dirt. Then, raise the crusher panel completely.
4. Perform the lockout/tagout procedure (see *Locking Out and Tagging Out the Vehicle* on page 32).
5. Open the clean-out traps located on each side of the truck.

6. Clean all accumulated dirt under cylinder brackets and inside the side tracks using the hoe and pressurized water if necessary. Be careful with proximity switches to prevent misalignment.
7. Perform a visual inspection for leaks or wear in this area.
8. Rake small pieces of garbage out of the clean-out doors using the hoe.

Figure 4-7 Clean-out door and hoe



9. Finish cleaning the area with pressurized water.

Daily Chassis Cleaning

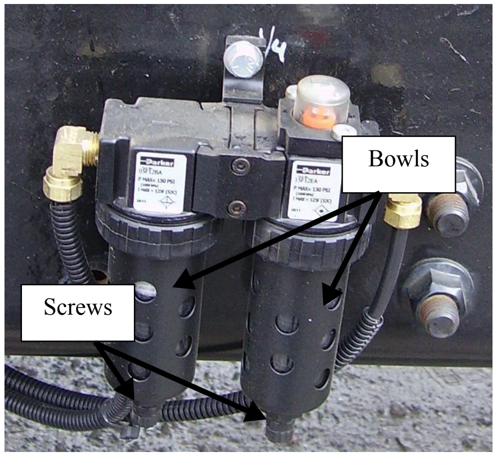
The following is the daily chassis cleaning procedure:

1. Start the engine.
2. Raise the body until the safety prop is free to tilt under the body.
3. Release the safety prop using the prop release handle (see Figure 4-6).
4. Apply the lockout/tagout procedure (see *Locking Out and Tagging Out the Vehicle* on page 32).
5. Clean with pressurized water between the body and the frame.
6. Clean the rear of cab.
7. Perform a visual inspection for leaks or wear in this area.
8. When finished, start the engine, lift the body and bring the safety prop back to its vertical position, then lower the body.
9. Clean the body all around with water and soap.
10. Rinse.

Water Trap Bleed

Usually located on the right-hand side truck frame, near mid-section, the water trap bleed must be drained at the end of every working day. Just slacken off both water trap bleed screws under the bowls and catch the water and oil that flow out with a rag. The water trap helps keep moisture out of the air system.

Figure 4-8 Water trap bleed



Troubleshooting Quick Reference

If an electrical failure occurs and prevents the operator from retracting the arm, the following procedure can be applied:

1. Apply the parking brake and put the transmission to neutral.
2. Install the control lever on the arm extend/retract section of the proportional valve located on the right-hand side of the vehicle. Using the control lever, retract the arm slowly in order to bring it back to its home position.

Danger!

Stay clear of the path of the arm at all times and do not open the grabber in mid-air when performing this procedure.

3. Contact your Service Center and refer to the Troubleshooting section of the *Maintenance Manual*.

Danger!

Never drive this vehicle if the automated arm is not retracted to its home position. The vehicle would be too high and/or too wide to be driven. Failure to completely retract the arm will result in unit and/or property damage, personal injury or death. Warning red lights on dashboard start flashing as soon as the arm begins to extend.

Figure 4-9 3-section proportional valve

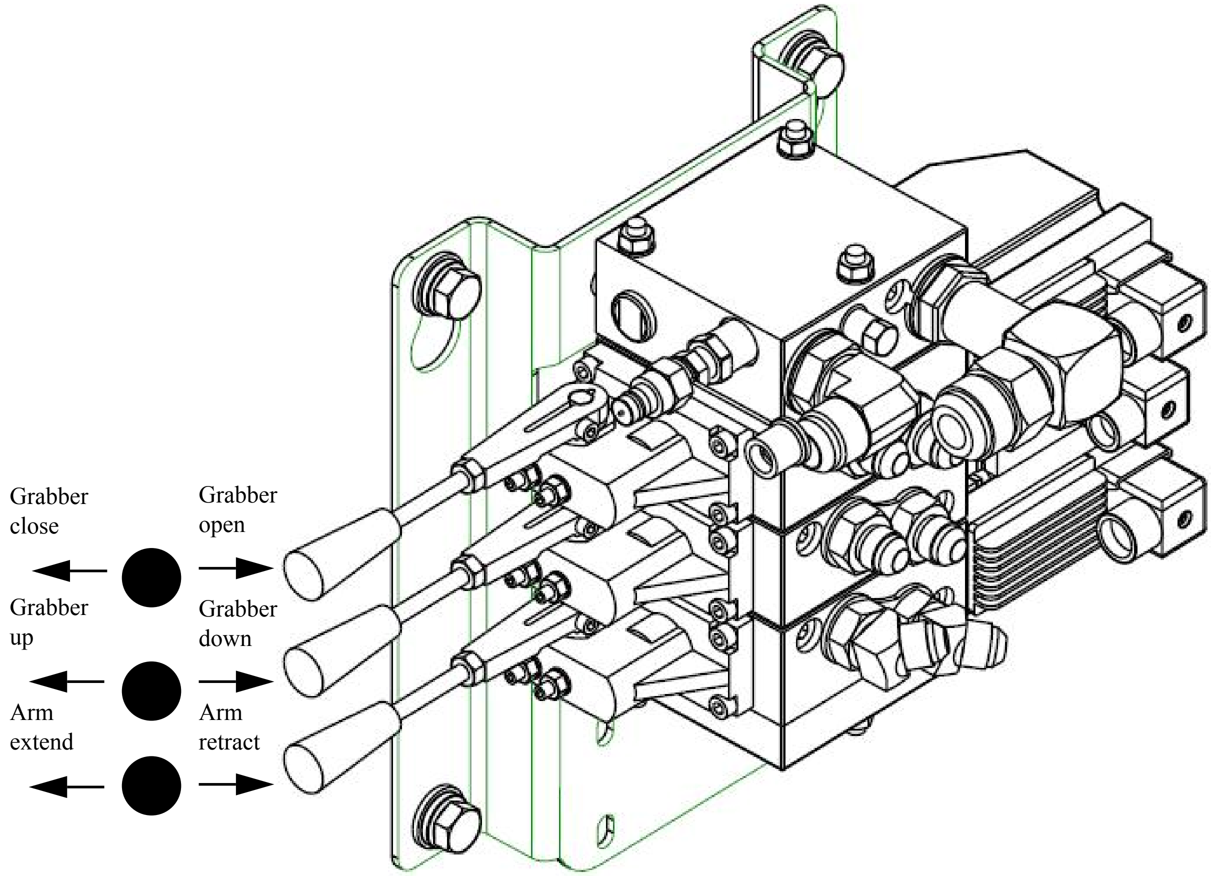


Figure 4-10 4-section proportional valve

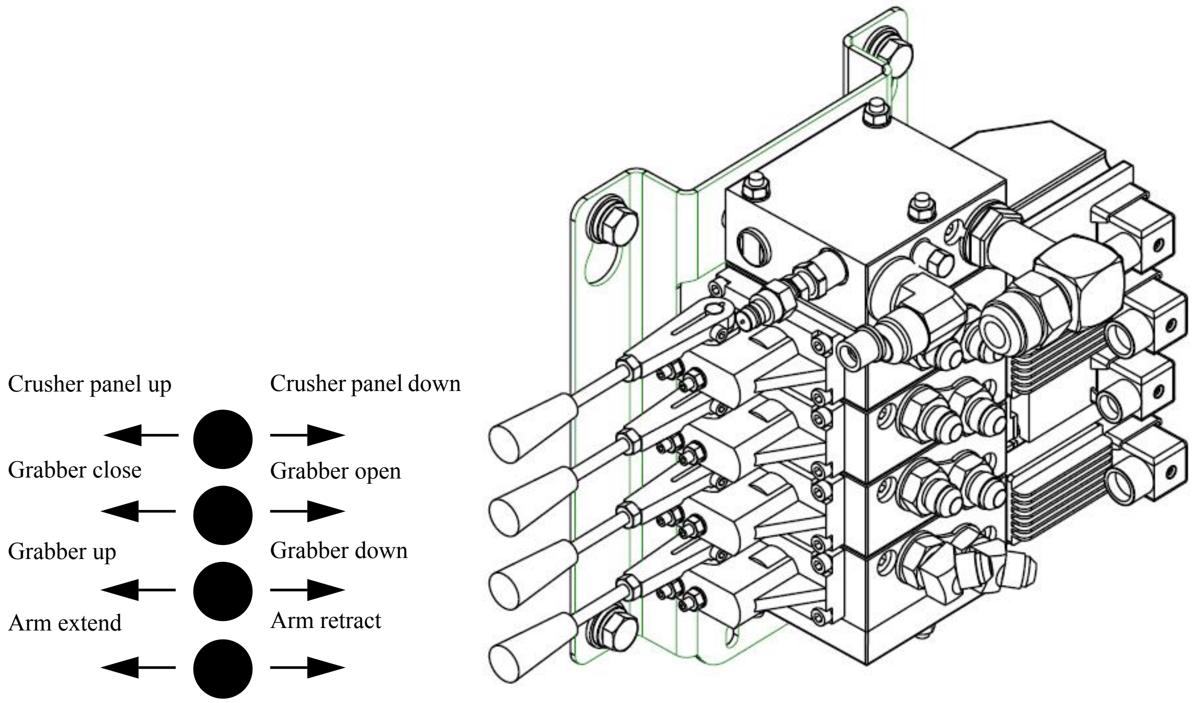
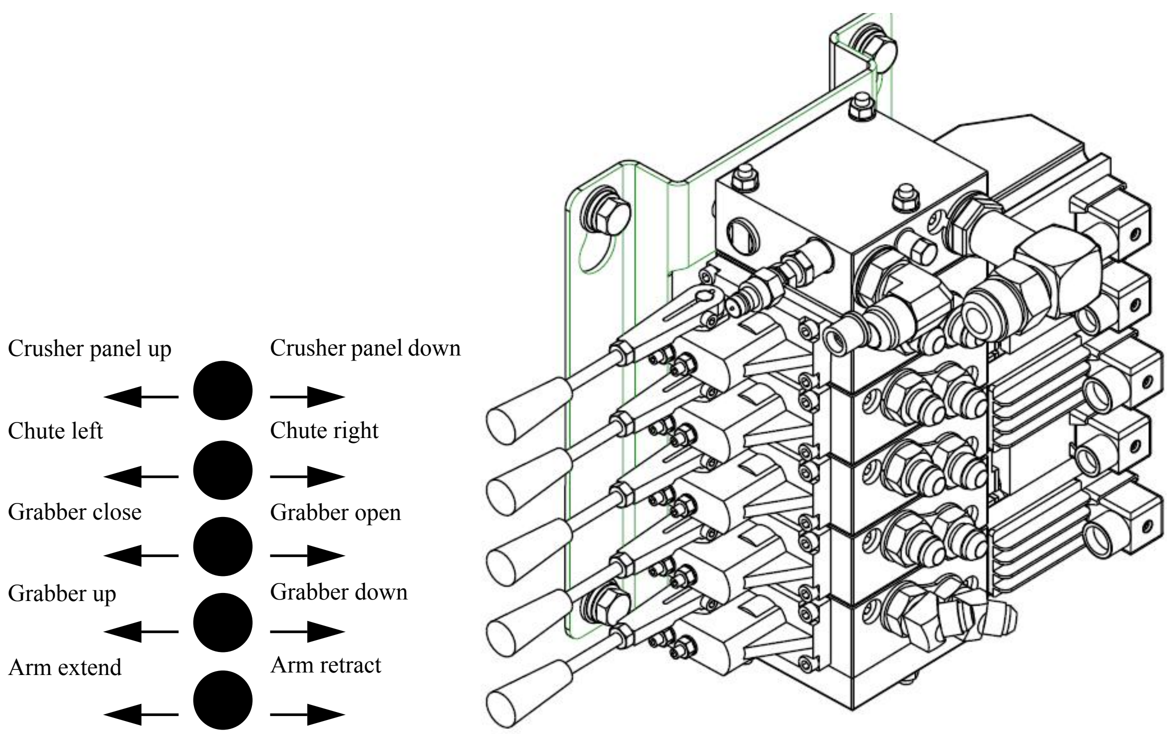


Figure 4-11 5-section proportional valve



Our office in the U.S.

1981 W. Snell Road
Oshkosh, WI 54904

Toll Free: 1-800-231-2771
Telephone: 1-920-233-2770
General Fax: 1-920-232-2496
Sales Fax: 1-920-232-2498

Mailing Address
P.O. Box 2785
Oshkosh, WI 54903-2785

Parts and Warranty
During business hours:
7:00 AM to 7:00 PM Central Standard Time

Technical Support Service
Toll Free: 1-800-231-2771
(24 hours)

Our office in Canada

175 Route du Pont
St-Nicolas, QC G7A 2T3

Toll Free: 1-877-831-8250
Telephone: 1-418-831-8250
Service Fax: 1-418-831-1673
Parts Fax: 1-418-831-7561

Mailing Address
175 Route du Pont
St-Nicolas, QC G7A 2T3

Parts and Warranty
During business hours:
8:00 AM to 5:00 PM Eastern Standard Time

Technical Support Service
Toll Free: 1-877-831-8250
(24 hours)

Part# 153168_R0